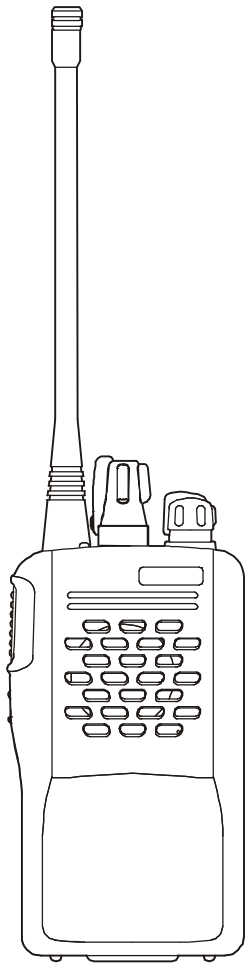
Vertex Standard

VX-210AU

UHF Band
Service Manual

EC020U90A

VERTEX STANDARD CO., LTD.
4-8-8 Nakameguro, Meguro-Ku, Tokyo 153-8644, Japan
VERTEX STANDARD
US Headquarters
10900 Walker Street, Cypress, CA 90630, U.S.A.
International Division
8350 N.W. 52nd Terrace, Suite 201, Miami, FL 33166, U.S.A.
YAESU EUROPE B.V.
P.O. Box 75525, 1118 ZN Schiphol, The Netherlands
YAESU UK LTD.
Unit 12, Sun Valley Business Park, Winnall Close
Winchester, Hampshire, SO23 0LB, U.K.
VERTEX STANDARD HK LTD.
Unit 5, 20/F., Seaview Centre, 139-141 Hoi Bun Road,
Kwun Tong, Kowloon, Hong Kong



Introduction

The Vertex VX-210AU is a compact hand portable transceiver for the UHF land mobile band that offers the convenience of small size, light weight, and simple operation.

The VX-210AU can be simply programmed by your Vertex Dealer with up to 16 channels for single and split frequency operation. The VX-210AU provides up to 5 watts of RF output power and includes a flexible quick-connect antenna.

The transceiver and Ni-Cd battery packs are constructed of thick high-impact polycarbonate plastic, with special attention paid by the designers to tight seals and ruggedness, assuring years of reliable operation even in harsh environments.

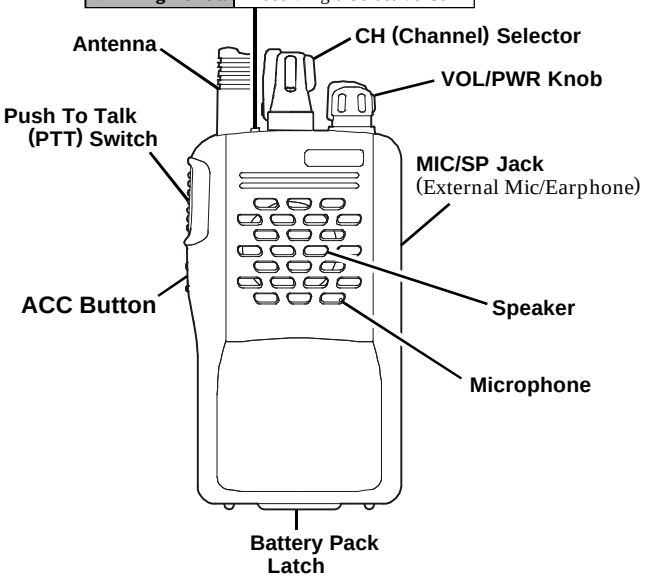
The following pages describe the operation, features and accessories of the VX-210AU. With proper care and operation, the transceiver will provide many years of reliable communications.

Contents

Contorols & Connectors

LED Indicator

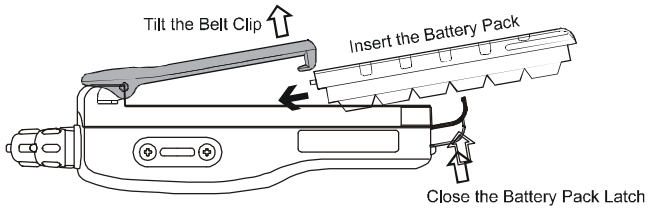
Glows Green	ACC on
Blinking Green	Busy Channel (or SQL off)
Glows Red	Transmitting
Blinking Red	Battery Voltage is low
Blinking Yellow	Receiving a Selective Call



Before You Begin

Battery Pack Installation and Removal

❒ To install the battery, hold the transceiver with your left hand, so your palm is over the speaker and your thumb is on the top of the belt clip. Insert the battery pack into the battery compartment on the back of the radio while tilting the Belt Clip outward, then close the Battery Pack Latch until it locks in place with a "Click."



❒ To remove the battery, turn the radio off and remove any protective cases. Open the Battery Pack latch on the bottom of the radio, then slide the battery downward and out from the radio while holding the Belt Clip.

Caution!

Do not attempt to open any of the rechargeable Ni-Cd packs, as they could explode if accidentally short-circuited.

Low Battery Indication

❒ As the battery discharges during use, the voltage gradually becomes lower. When the battery voltage reaches 6.3 volts, substitute a freshly charged battery and recharge the depleted pack. The **TX/BUSY** indicator on the top of the radio will blink ***red*** when the battery voltage is low.

❒ Avoid recharging Ni-Cd batteries often with little use between charges, as this can degrade the charge capacity. We recommend that you carry an extra, fully-charged pack with you so the operational battery may be used until depletion (this "deep cycling" technique promotes better long-term battery capacity).

Operation

Preliminary Steps

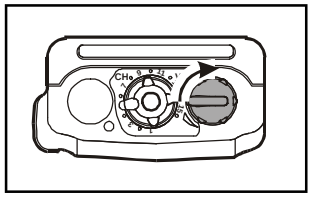
❒ Install a charged battery pack onto the transceiver, as described previously.

❒ Screw the supplied antenna onto the Antenna jack. Never attempt to operate this transceiver without an antenna connected.

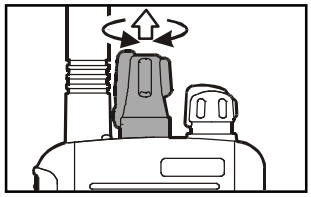
❒ If you have a Speaker/Microphone, we recommend that it not be connected until you are familiar with the basic operation of the **VX-210A**.

Operation Quick Start

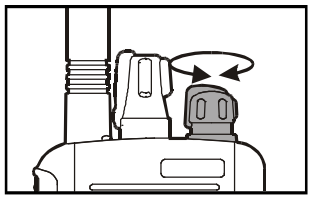
❒ Turn the top panel's **VOL/PWR** knob clockwise to turn on the radio on.



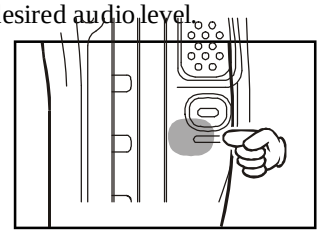
❒ *Pull and turn* the top panel's **CH** selector knob to choose the desired operating channel.

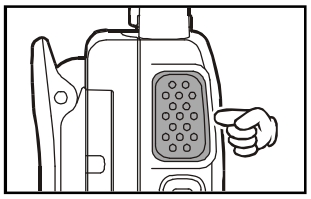


❒ Rotate the **VOL/PWR** knob to set the volume level. If no signal is present, press and hold in the **ACC** button (the lower button on the left side) for more than 1 second (when "MONITOR" is assigned to the **ACC** button); background noise will now be heard, and you may use this to set the **VOL/PWR** knob for the desired audio level.



❒ Press and hold in the **ACC** button (when "MONITOR" is assigned to the **ACC** button) for more than 1 second (or press the **ACC** button twice) to quiet the noise and resume normal (quiet) monitoring.





❒ To transmit, press and hold in the **PTT** switch. Speak into the microphone area of the front panel grille (lower left-hand corner) in a normal voice level. To return to the Receive mode, release the **PTT** switch.

❒ If a Speaker/Microphone is available, remove the plastic cap and its two mounting screws from the right side of the transceiver, then insert the plug from the Speaker/Microphone into the **MIC/SP** jack; secure the plug using the screws supplied with the Speaker/Microphone. Hold the speaker grille up next to your ear while receiving. To transmit, press the **PTT** switch on the Speaker/Microphone, just as you would on the main transceiver's body.

Note:
Save the original plastic cap and its mounting screws. They should be re-installed when not using the Speaker/Microphone.

Key Functions

The **VX-210A** provides a programmable "**ACC**" (Accessory) button. The **ACC** button's functions can be customized (set to any of a variety of functions), via programming by your **VERTEX STANDARD** dealer, to meet your communications/network requirements. The particular function to be activated or disabled may require a simple press of the **ACC** button, or it may require that the **ACC** button be pressed and held in for one second (or more). See the discussion below.

Some features may require the purchase and installation of optional internal accessories.

The possible **ACC** button programming features are illustrated below, and their functions are explained in the next chapter. For further details, contact your **VERTEX STANDARD** dealer.

For future reference, check the box next to the function that has been assigned to the **ACC** button on your particular radio, and keep it handy.

Function	**ACC** button	
	Press	Press and Hold
None		
Monitor		
Squelch OFF		
Low Power		
Scan		
Follow-me Scan		
Dual Watch		
Talk Around		
Call/Reset		
Speed Dial		
TX Save Off		
ACC 1		
ACC 2		

Description of Operating Functions

Monitor

Press the **ACC** button to override (disable) the Tone Squelch. Background noise or incoming signals will now be heard whether or not a matching tone is present on the signal. Press the **ACC** button once more to resume normal (quiet) Tone Squelch action.

Squelch OFF

Press the **ACC** button to override both the Noise and Tone squelch systems. Again press the **ACC** button to resume normal (quiet) Noise and Tone squelch action.

Low Power

Press the **ACC** button to set the radio's transmitter to the "Low Power" mode, thus extending battery life. Press the **ACC** button again to return to "High Power" operation when in difficult terrain.

Scan

The Scanning feature is used to monitor multiple channels programmed into the transceiver. While scanning, the radio will check each channel for the presence of a signal, and will stop on a channel if a signal is present.

❒ To activate scanning:
Press the **ACC** button.
The scanner will search the channels, looking for "active" ones; it will pause each time it finds a channel on which someone is speaking.

❒ To stop scanning:
Press the **ACC** button.
Operation will revert to the channel to which the **CH** knob is set.

Follow-Me Scan

"Follow-Me" Scan feature checks a User-assigned Priority Channel regularly as you scan the other channels. Thus, if only Channels 1, 3, and 5 (of the 8 available channels) are designated for "Scanning," the user may nonetheless assign Channel as the "User-assigned" Priority Channel via the "Follow-Me" feature.

Press the **ACC** button to activate "Follow-Me" scanning, then *pull and turn* the **CH** selector knob to the channel which you want to designate as the "User-Assigned Priority Channel". When the scanner stops on an "active" channel, the User-assigned Priority Channel will automatically be checked every few seconds.

Dual Watch

The Dual Watch feature is similar to the Scan feature, except that only two channels are monitored: the current operating channel, and the "Priority" channel.

❒ To activate Dual Watch:
Press the ACC button.
The scanner will search the two channels; it will pause each time it finds a channel on which someone is speaking.

❒ To stop Dual Watch:
Press the **ACC** button.
Operation will revert to the channel to which the **CH** knob is set.

Talk Around

Press the **ACC** button to activate the Talk Around feature when you are operating on duplex channel systems (separate receive and transmit frequencies, utilizing a "repeater" station). The Talk Around feature allows you to bypass the repeater station and talk directly to a station that is nearby. This feature has no effect when you are operating on "Simplex" channels, where the receive and transmit frequencies are already the same.

Note that your dealer may have made provision for "Talk Around" channels by programming "repeater" and "Talk Around" frequencies on two adjacent channels. If so, the **ACC** key may be used for one of the other Pre-Programmed Functions.

Call/Reset

When the 2-tone selective calling unit is installed, press the **ACC** button to silence the receiver and reset for another call, when a communication is finished.

Speed Dial

Your Dealer may have pre-programmed Auto-Dial telephone number memories into your radio.

To dial a number, just press the Dealer-assigned **ACC** button for Speed Dialing. The DTMF tones sent during the dialing sequence will be heard in the speaker.

TX Save Off

Press the **ACC** button to disable the Transmit Battery Saver, if you are operating in a location where high power is almost always needed.

The Transmit Battery Saver helps extend battery life by reducing transmit power when a very strong signal from an apparently nearby station is being received. Under some circumstances, though, your hand-held radio may not be heard well at the other end of the communication path, and high power may be necessary at all times.

ACC 1

Activates an optional Unit (module) while the **ACC** button is held depressed.

When you release the **ACC** button, the optional Unit will be disabled.

For further details, contact your **VERTEX STANDARD** dealer.

ACC 2

Toggles the optional Unit "on" or "off" whenever you press the **ACC** button.

For example, when the optional "FVP-25" voice encryption unit is installed, press the **ACC** button momentarily to disable the voice encryption feature temporarily.

Press the **ACC** button again to re-enable the voice encryption feature.

Accessories & Options

FNB-V57	7.2 V 1100 mAh Ni-Cd Battery Pack
FNB-V57IS	7.2 V 1100 mAh Ni-Cd Intrinsically safe Battery
FBA-25	Alkaline Battery Case (6 x AA)
NC-76B	120 VAC Wall Charger
NC-76C	230-240 VAC Wall Charger
VAC-6400	6-Unit Multi charger
VAC-400B	120 VAC Desktop Rapid Charger
VAC-400C	230-240 VAC Desktop Rapid Charger
VCM-1	Mobile Mounting Bracket for VAC-400
MH-45B4B	Speaker/Microphone
MH-37A4B	Earpiece/Microphone
VC-25	VOX Headset
FVP-25	Encryption /DTMF Page Unit
VTP-50	VX-Trunk Unit
CT-42	PC-Programming Cable (CT-28 + CT-29)
CT-27	Cloning Cable (Set-to-Set Cloning)
FTT-17	16 keypad for VX-Trunk (VTP-50 required)
LCC-210	Leather Case

Specifications

General

Frequency Range:	400-430 MHz (AS1), 440-470 MHz (CS), 450-485 MHz (D), 485-512 MHz (F)
Number of Channels:	16 channels
Channel Spacing:	12.5/25 kHz
PLL Steps:	5/6.25 kHz
Power Supply Voltage:	7.5 V DC ±20 %
Battery Life (5-5-90 duty):	7.1 hrs. (8.5 hrs. w/saver) @5 W
Operating Temperature Range:	–22° F to +140° F (–30° C to +60° C)
Frequency Stability:	±2.5 ppm
Dimensions:	4.21" (W) × 2.28" (H) × 1.0" (D) (108 × 58 × 26 mm)
Weight (Approx):	0.75 lb. (340 g) w/FNB-V57

Receiver (Measurements made per EIA standard TIA/EIA-603)

Sensitivity:	EIA 12 dB SINAD: 0.25 µV
	20 dB Quieting: 0.35 µV
Adjacent Channel Selectivity:	65 dB (25 kHz)/60 dB (12.5 kHz)
Intermodulation:	65 dB
Spurious and Image Rejection:	65 dB
Hum & Noise:	45 dB
Audio Output:	500 mW @4 Ohms, 5% THD

Transmitter (Measurements made per EIA standard TIA/EIA-603)

Power Output:	5 / 1 W (Selectable) or 3.5 / 1 W (Selectable) w/FBA-25
Modulation:	16K0F3E / 11K0F3E (Direct FM)
Conducted Spurious Emission:	60 dB Below Carrier
FM Hum & Noise:	40 dB (25 kHz) / 35 dB (12.5kHz)
Audio Distortion (@1 kHz):	< 5 %

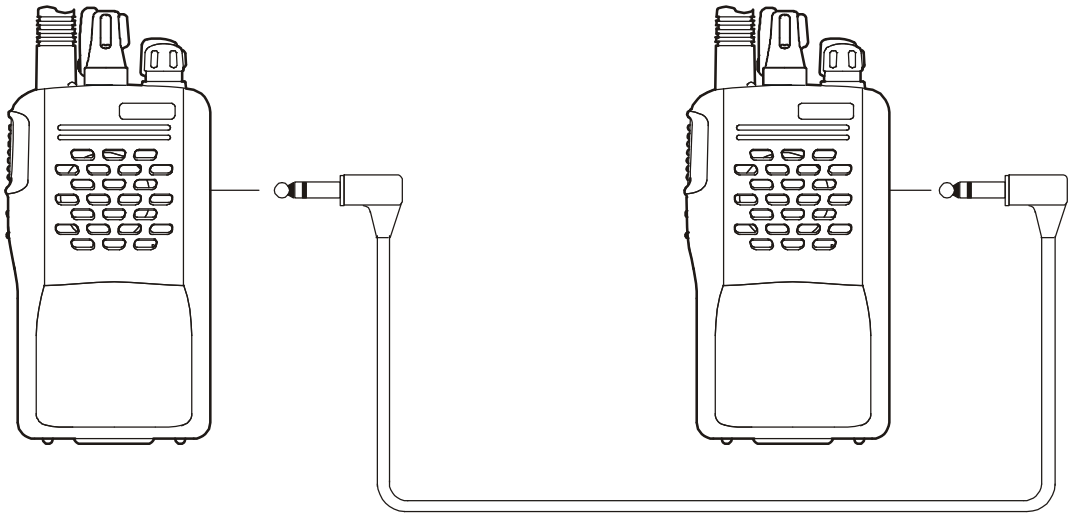
Specifications subject to change without notice or obligation.

Cloning

The **VX-210A** includes a convenient "Clone" feature, which allows the programming data from one transceiver to be transferred to another **VX-210A**. Here is the procedure for Cloning one radio's data to another.

Note: When a cloning isn't made, you correct the following part using "CE45."
When a "Set-to-Set Clone" which is in the "Miscellaneous" menu is "Disabled," change this menu to "Enabled."

1. Turn both transceivers off.
2. Remove the plastic cap and its two mounting screws from the **MIC/SP** jack on the right side of the transceiver. Do this for both transceivers.
3. Connect the optional **CT-27** cloning cable between the **MIC/SP** jacks of the two transceivers.
4. Press and hold the **PTT** switch and **ACC** button (just below the **PTT** switch) while turning the transceiver on. Do this for both transceivers (the order of the switch-on does not matter).
5. On the ***Destination*** transceiver, press the **ACC** button (LED indicator will glow green).
6. Now, on the ***source*** transceiver, Press the **PTT** switch.Data will now be transferred to the ***Destination*** transceiver from the ***source*** transceiver (LED indicator will glow red).
7. If there is a problem during the cloning process, LED indicator will blink red from source the transceiver.
   Check your cable connections and battery voltage, and try again.
8. If cloning is a successful, LED indicator will be disappeared, turn the ***Destination*** transceiver off. Now turn the ***source*** transceiver off.
9. Disconnect the **CT-27**. Replace the plastic cap and its two mounting screws.
10. You can then turn the transceivers back on, and begin normal operation.



Optional Cloning Cable **CT-27**

Dealer Programming of VTP-50

These procedures are designed to be used by the installing technician after the **VTP-50** has been installed in the transceiver. To program a **VX-210A**'s **VTP-50** board, you will need the **CT-42** programming interface cable, the **CE26** Programming diskette, and an IBM PC/AT or PS/2-compatible tyoe computer.

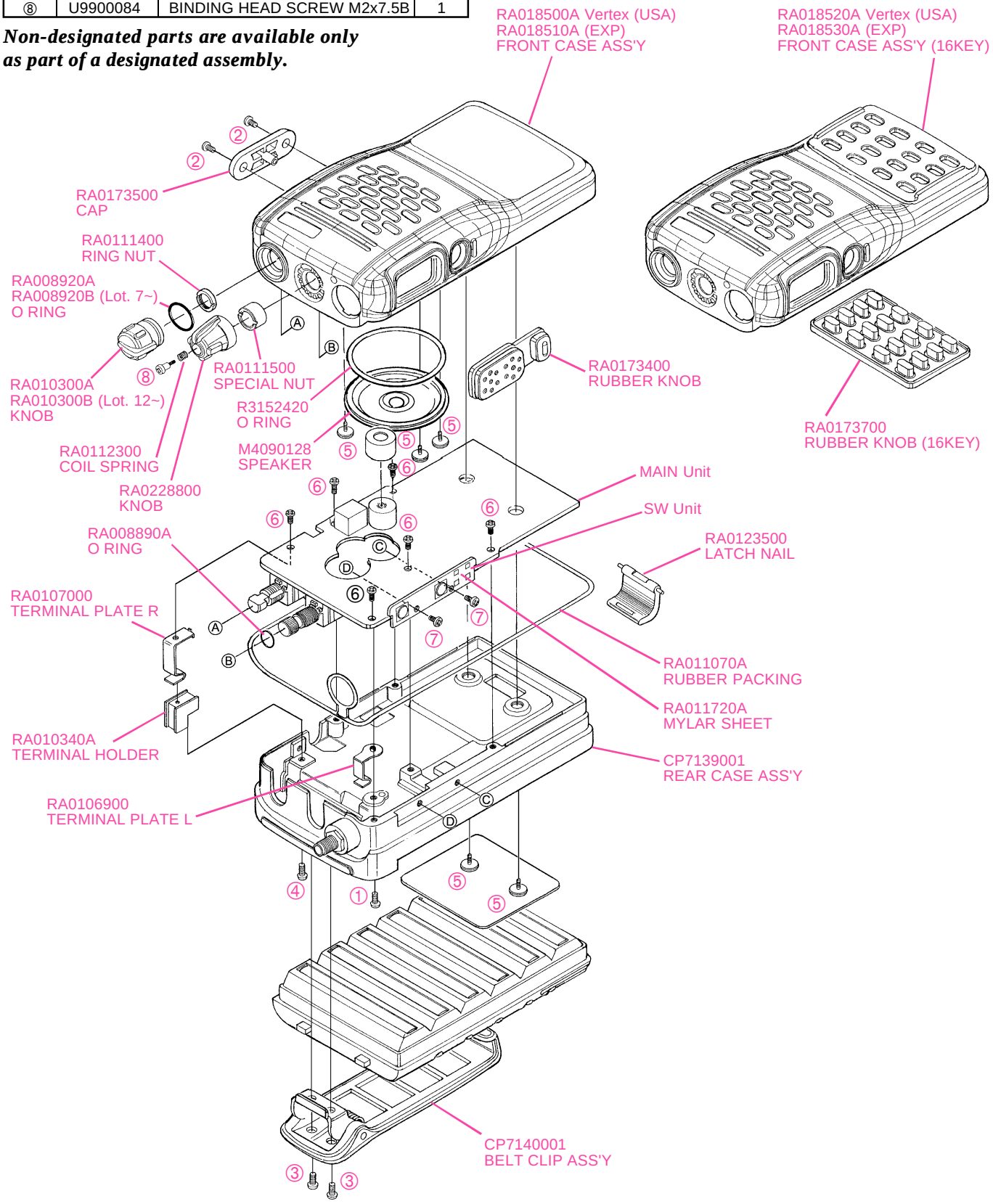
To enter the Programming mode, use the following procedure:

1. Turn the transceiver off.
2. Turn on the transceiver while holding in the **ACC** button (just below the **PTT** switch).

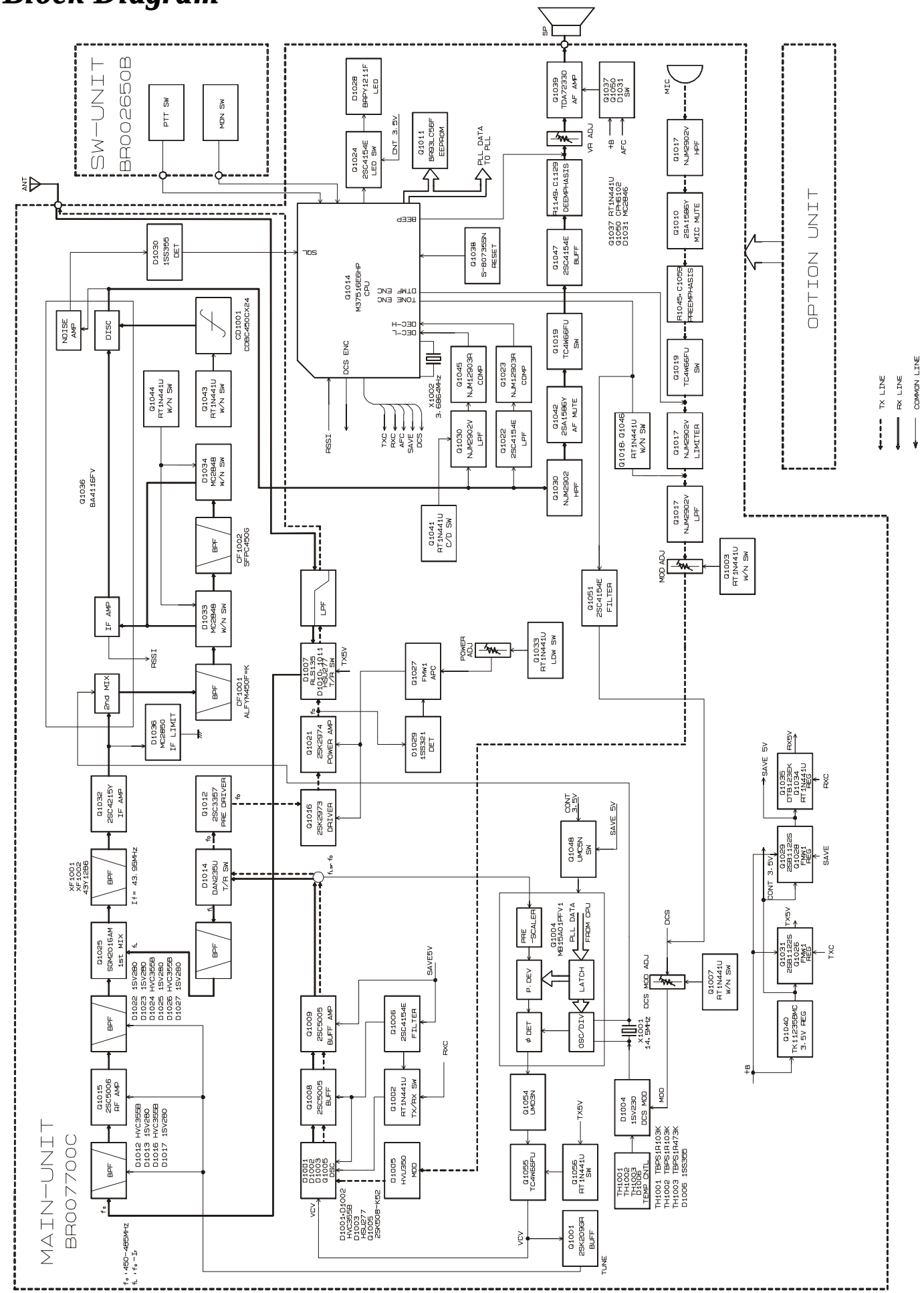
Exploded View & Miscellaneous Parts

REF.	VXSTD P/N	Description	Qty.
①	U07230107	PAN HEAD SCREW M2x3B #1	1
②	U20204007	BINDING HEAD SCREW M2.6x4B	2
③	U02206007	SEMS SCREW SM2.6x6B	2
④	U9900051	TAPTITE SCREW M2x4B #3	1
⑤	U9900063	TAPTITE SCREW M2x3.3Ni	5
⑥	U9900068	TAPTITE SCREW M2x4Ni #3	6
⑦	U9900086	TAPTITE SCREW M1.7x2.5B	2
⑧	U9900084	BINDING HEAD SCREW M2x7.5B	1

Non-designated parts are available only as part of a designated assembly.



Block Diagram



1. Receive Signal Path

Incoming RF from the antenna jack is delivered to the RF Unit and passes through a low-pass filter consisting of coils L1003, L1006 and L1007, capacitors C1002, C1007, C1013, C1017, C1022, C1025, and C1169 and antenna switching diode D1007 (**RLS135**).

Signals within the frequency range of the transceiver enter a varactor-tuned band-pass filter consisting of coils L1014 and L1015, capacitors C1057, C1058, C1064, C1071 and C1073, and diodes D1012 (**HVC355B**), D1013 (**1SV280**), D1016 (**HVC355B**) and D1017 (**1SV280**). The signals are then amplified by Q1015 (**2SC5006**), and enter a varactor-tuned band-pass filter consisting of coils L1018, L1021 and L1024, capacitors C1084, C1088, C1089, C1094, and C1096, and diodes D1022, D1024, D1026 (**HVC355B**) and D1023, D1025 and D1027 (**1SV280**), before mixing by Q1025 (**SGM2016**).

Buffered output from the VCO is amplified by Q1009 (**2SC5005**) to provide a pure first local signal between 406.05 and 441.05 MHz for injection to the first mixer, Q1025. The 43.95 MHz first mixer product then passes through monolithic crystal filters XF1001 and XF1002 (**43Y12B6**, ±6.0 kHz BW) to strip away unwanted mixer products, and is then amplified by Q1032 (**2SC4215Y**).

The amplified first IF signal is applied to FM IF subsystem IC Q1036 (**BA4116FV**), which contains the second mixer, second local oscillator, limiter amplifier, noise amplifier, and S-meter amplifier.

A second local signal is generated by the PLL reference/second local oscillator, 14.50 MHz crystal X1001, to produce the 450 kHz second IF when mixed with the first IF signal within Q1036.

The second IF then passes through the ceramic filter CF1001 (**ALFYM450F**) or CF1002 (**SFPC450G**: only on "Narrow" channels) to strip away all but the desired signal, and is then applied to the limiter amplifier in Q1036, which removes amplitude variations in the 450kHz IF, before detection of the speech by the ceramic discriminator CD1001 (**CDBC450CX24**).

Detected audio from Q1036 is applied to the audio high-pass filter, and then passes via the volume control to the audio amplifier Q1039 (**TDA7233D**), which provides up to 0.5 Watts to the optional headphone jack or a 4-ohm loudspeaker.

2. Squelch Control

The squelch circuitry consists of a noise amplifier and band-pass filter within Q1036, and noise detector D1030 (**1SS355**).

When no carrier is received, noise at the output of the detector stage in Q1036 is amplified and band-pass filtered by the noise amplifier section of Q1036 and the network between pins 7 and 8, and then is rectified by D1030.

The resulting DC squelch control voltage is passed to pin 37 of the microprocessor Q1014 (**M37515M4-117HP**). If no carrier is received, this signal causes pin 7 of Q1014 to go high and pin 20 to go low. Pin 7 signals Q1037 (**IMD10A**) to disable the supply voltage to the audio amplifier Q1039, while pin 20 makes Q1023 (**IMX1**) hold the green (Busy) half of the LED off, when pin 7 is high and pin 20 is low.

Thus, the microprocessor blocks output from the audio amplifier, and silences the receiver, while no signal is being received (and during transmission, as well).

When a carrier appears at the discriminator, noise is removed from the output, causing pin 37 of Q1014 to go low and the microprocessor to activate the "Busy" LED via Q1014.

The microprocessor then checks for CTCSS or CDCSS code squelch information, if enabled, or for DTMF data on the optional DTMF Unit. If not transmitting, and CTCSS or CDCSS is not activated, or if the received tone or code matches that programmed for that channel, audio is allowed to pass through the audio amplifier Q1039 (**TDA7233D**) to the loudspeaker because of the enabling of the supply voltage via Q1037.

3. Transmit Signal Path

Speech input from the microphone is amplified by Q1017 (**NJM2902V**); after pre-emphasis by C1059 and R1045, the audio passes through another section of Q1017.

The processed audio may then be mixed with a CTCSS tone generated by Q1014 (**M37515M4-117HP**), and then delivered to D1005 (**HVU350**) for frequency modulation of the PLL carrier (up to ±5kHz from the unmodulated carrier) at the transmitting frequency.

If a CDCSS code is enabled for transmission, the code is generated by microprocessor Q1014 and delivered to D1004 (**1SV230**) for CDCSS modulating.

If DTMF is enabled for transmission, the tone is generated by the microprocessor Q1014 and applied to the limiter amplifier section in place of the speech audio. Also, the tone is amplified for monitoring in the loudspeaker.

The modulated signal from the VCO Q1005 (**2SK508-K52**) is buffered by Q1008 (**2SC5005**) and amplified by Q1009 (**2SC5005**). The low-level transmit signal is then passed through the T/R switching diode D1014 (**DAN235U**) to the driver amplifiers Q1012 (**2SC3357**) and Q1016 (**2SK2973**). The amplified transmit signal is applied to the final amplifier Q1021, providing up to 5 Watts

of output power.
The transmit signal then passes through the antenna switch D1007 (**RLS135**) and is low-pass filtered to suppress harmonic spurious radiation before delivery to the antenna.

3-1 Automatic Transmit Power Control

RF power output from the final amplifier is sampled by C1099, and is rectified by D1029 (**1SS321**). The resulting DC is fed back through Q1027 (**FMW1**) to the drive amplifier Q1016 and final amplifier Q1021, for control of the power output.
The microprocessor selects "High" or "Low" power levels.

3-2 Transmit Inhibit

When the transmit PLL is unlocked, pin 7 of PLL chip Q1004 goes to a logic "low." The resulting DC unlock control voltage is passed to pin 24 of the microprocessor Q1014. While the transmit PLL is unlocked, pin 22 of Q1014 remains high, which then turns off Q1031 and the Automatic Power Controller Q1027 (**FMW1**) to disable the supply voltage to the drive amplifiers Q1012 and Q1016 and final amplifier Q1021, thereby disabling the transmitter.

3-3 Spurious Suppression

Generation of spurious products by the transmitter is minimized by the fundamental carrier frequency being equal to final transmitting frequency, modulated directly in the transmit VCO. Additional harmonic suppression is provided by a low-pass filter consisting of L1003, L1006, and L1007 plus C1002, C1007, C1013, C1017, C1022, and C1169, resulting in more than 60 dB (High Power) of harmonic suppression prior to delivery to the antenna.

4. PLL Frequency Synthesizer

The PLL circuitry on the Main Unit consists of VCO Q1005 (**2SK508-K52**), VCO buffer Q1008 (**2SC5005**), and PLL subsystem IC Q1004 (**MB15A01FV1**), which contains a reference divider, serial-to-parallel data latch, programmable divider, phase comparator and charge pump.

Stability is maintained by a regulated 3.5 V supply, via Q1040 (**TK11235BMCL**) and R1019/R1020, temperature compensating thermistors TH1001, TH1002, and TH1003, and varactor diode D1004 (**1SV230**), which is associated with the 14.50 MHz frequency reference crystal X1001.

While receiving, VCO Q1005 oscillates between 406.05 and 441.05 MHz according to the transceiver version and the programmed receiving frequency. The VCO output is buffered by Q1008, then applied to the prescaler section of Q1004. There the VCO signal is divided by 64 or 65, according to a control signal from the data latch section of Q1004, before being sent to the programmable divider section of Q1004.

The data latch section of Q1004 also receives serial dividing data from the microprocessor Q1014, which causes the pre-divided VCO signal to be further divided in the programmable divider section, depending upon the desired receive frequency, so as to produce a 5 kHz or 6.25 kHz derivative of the current VCO frequency.

Meanwhile, the reference divider section of Q1004 divides the 14.5 MHz crystal reference from the reference oscillator Q1004, by 2900 (or 2320) to produce the 5 kHz (or 6.25 kHz) loop reference (respectively).

The 5 kHz (or 6.25 kHz) signal from the programmable divider (derived from the VCO) and that derived from the reference oscillator are applied to the phase detector section of Q1004, which produces a pulsed output with pulse duration depending on the phase difference between the input signals.

This pulse train is filtered to DC and returned to the varactor D1001 (**HVC355B**) and D1002 (**HVC355B**). Changes in the level of the DC voltage applied to the varactor affect the reference in the tank circuit of the VCO according to the phase difference between the signals derived from the VCO and the crystal reference oscillator.

The VCO is thus phase-locked to the crystal reference oscillator. The output of the VCO Q1005, after buffering by Q1008 and amplification by Q1009, is applied to the first mixer as described previously.

For transmission, the VCO Q1005 oscillates between 450 and 485 MHz according to the model version and programmed transmit frequency. The remainder of the PLL circuitry is shared with the receiver. However, the dividing data from the microprocessor is such that the VCO frequency is at the actual transmit frequency (rather than offset for IFs, as in the receiving case). Also, the VCO is modulated by the speech audio applied to D1005 (**HVU350**), as described previously.

Receive and transmit buses select which VCO is made active by Q1002 (**RT1N441U**).

5. Miscellaneous Circuits

5-1 Push-To-Talk Transmit Activation

The PTT switch on the microphone is connected to pin 35 of microprocessor Q1014, so that when the PTT switch is closed, pin 23 of Q1014 goes low. This signal disables the receiver by disabling the 5 V supply bus at Q1035 (**DTB123EK**) to the front-end, FM IF subsystem IC Q1036, and the receiver's VCO circuitry.
At the same time, Q1026 (**FMW1**) and Q1031 (**2SB1122S**) activate the transmit 5V supply line to enable the transmitter.

The VX-210A has been carefully aligned at the factory for the specified performance across the frequency range specified for each version. Re-alignment should therefore not be necessary except in the event of component failure, or altering version type. All component replacement and service should only be performed by an authorized Vertex representative, or the warranty policy may be void.

Required Test Equipment

- ❍ CT-42 Programming Cable with CE45 Channel Programming Diskette
- ❍ RF Signal Generator with calibrated output level at 1GHz
- ❍ Deviation Meter (Linear Detector)
- ❍ AC Voltmeter
- ❍ SINAD Meter
- ❍ In-Line wattmeter with 5 % accuracy at 500 MHz
- ❍ Regulated DC Power Supply adjustable from 4 to 10 V, 3 A
- ❍ 50-ohm Non-reactive Dummy Load: 10 W at 500 MHz
- ❍ Frequency Counter: ±0.2 ppm accuracy at 500 MHz
- ❍ AF Signal Generator
- ❍ DC Voltmeter: high impedance

Before beginning alignment, connect the transceiver and PC using the CT-42 Programming Cable, and run the CE45 Channel Programming Diskette, then download the EEPROM data from the transceiver to the computer. Then store this data in a disk file so that it can be uploaded when alignment is finished.

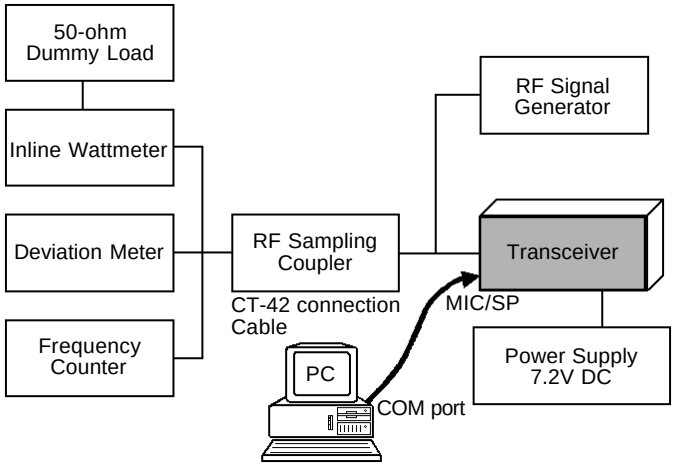
You should find the corresponding data file on the computer disk for the transceiver version you are aligning, containing channel settings for the high edge, middle and low edge of the transceiver's frequency range in channels 1, 2 and 3, respectively. Up-load this file to the transceiver.

Channels	Version D	Version CS	Version AS1
Low Band Edge (Channel 1)	450.000 MHz	440.000 MHz	400.000 MHz
Band Center (Channel 2)	470.000 MHz	455.000 MHz	415.000 MHz
High Band Edge (Channel 3)	490.000 MHz	470.000 MHz	430.000 MHz

Note: *Signal levels in dB referred to in the alignment procedure are based on 0 dBµ EMF= 0.5µV (closed circuit).*

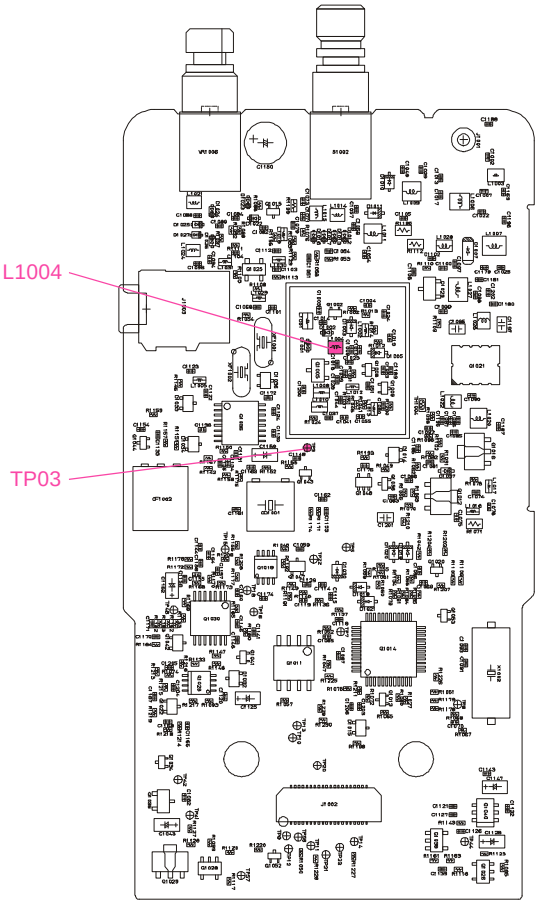
PLL & Transmitter

Set up the test equipment as shown for transmitter alignment. Adjust the supply voltage to 7.2 V for all steps where not specified otherwise.



PLL VCV (Varactor Control Voltage)

- ❒ Connect the DC voltmeter between **TP03** on the chip side of the Main Unit and ground.
- ❒ Set the transceiver to CH 3 (high band edge), and adjust **L1004** on the chip side of the Main Unit for 3.6 V (±0.1 V) on the voltmeter.
- ❒ Set the transceiver to CH 1 (low band edge), and confirm the low-end VCV is more than 0.8 V while transmitting, and also while receiving.



Alignment

PLL Reference Frequency

❒ Set the transceiver to CH 2 (band center). Key the transmitter, and adjust **TC1001** on the component side of the Main Unit, if necessary, so the frequency counter displays the band center frequency (±100 Hz) (for the version being aligned) when transmitting.

Transmitter Output Power

❒ Set the transceiver to CH 2 (band center), and select high power output.

❒ Ensure that the supply voltage is precisely 7.2 V, then adjust **VR1004** on the component side of the Main Unit (while the PTT switch is pressed) for 5.0 W on the wattmeter, and confirm that supply current remains below 2.0 A.

Modulation Level

❒ Set the transceiver to CH 2 (band center), and adjust the AF generator for -10 dBm output at 1 kHz to the EXT MIC jack.

❒ Press the PTT switch, and adjust **VR1002** on the component side of the Main Unit for a deviation of ±4.2 kHz (for 25 kHz steps), or ±2.1 kHz (for 12.5 kHz steps).

DCS Modulation Level

❒ Set the transceiver to CH 2 (band center), and activate the DCS with a code number of 627.

❒ Press the PTT switch, and adjust **VR1003** on the component side of the Main Unit for a deviation of ±0.75 kHz (for 25 kHz steps), or ±0.45 kHz (for 12.5 kHz steps).

Receiver

Sensitivity

❒ Set the transceiver to CH 3 (high band edge), and tune the RF signal generator to the same frequency; set the generator for ±3.0 kHz deviation with 1 kHz tone modulation, and set the output level for 40 dBµ at the antenna jack.

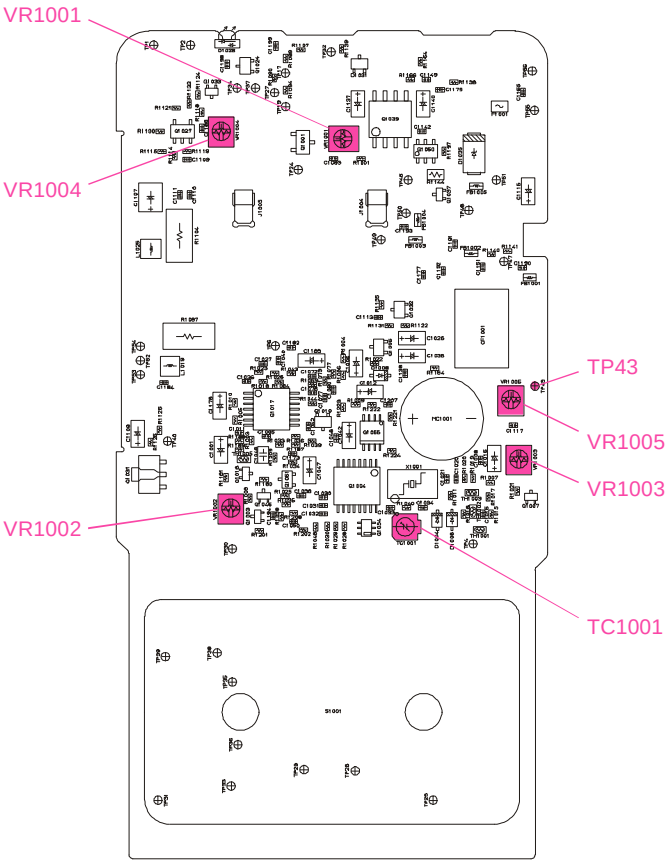
❒ Adjust **VR1001** on the component side of the Main Unit for optimum SINAD, and confirm that signal generator level is better than -6 dBµ for 12 dB SINAD.

RSSI

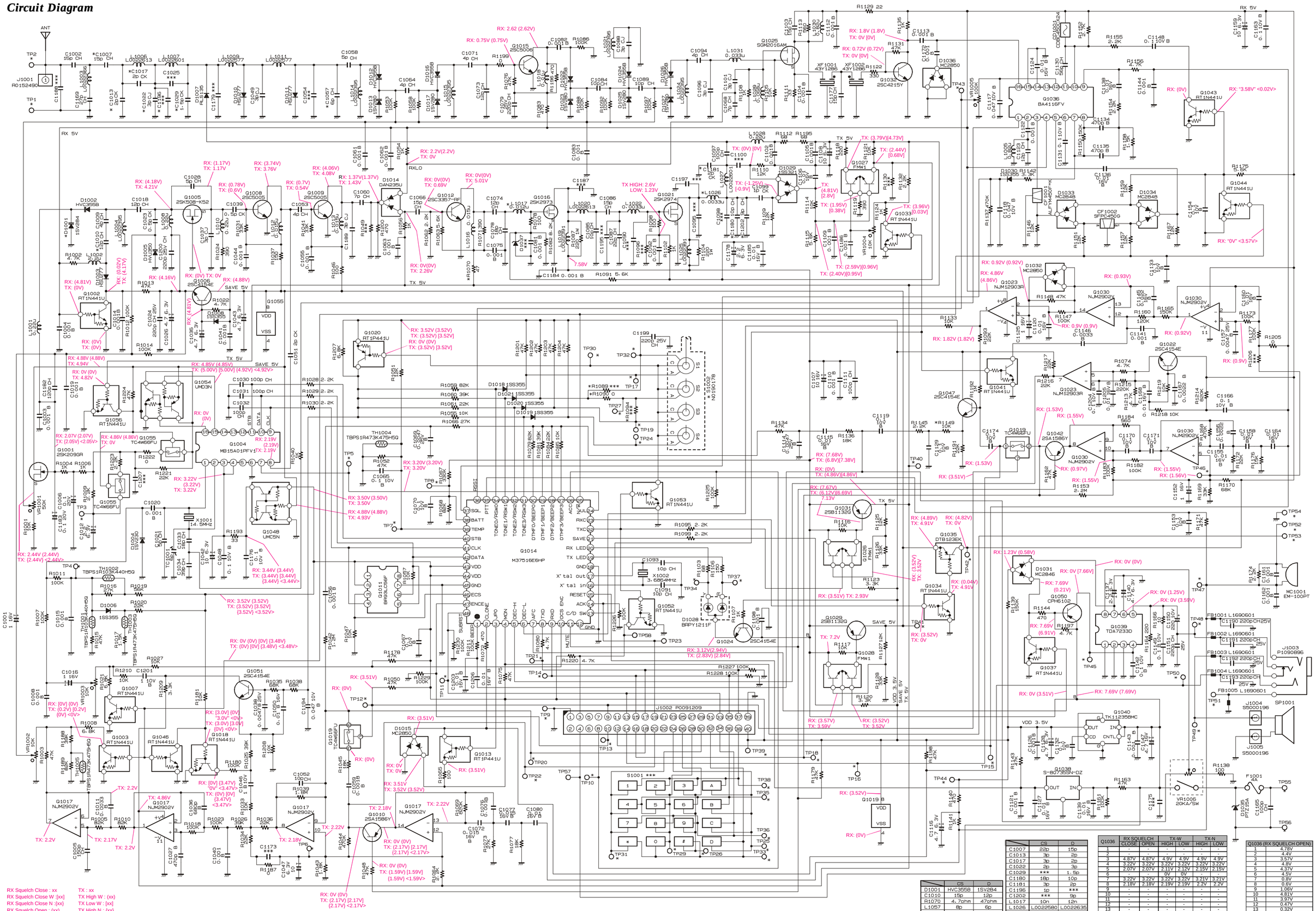
❒ Connect the DC voltmeter between **TP43** on the component side of the Main Unit and ground.

❒ Set the transceiver to CH 2 (band center), and tune the RF signal generator to the same frequency; set the generator for ±3.0 kHz deviation with 1 kHz tone modulation, and set the output level for 15 dBµ at the antenna jack.

❒ Adjust **VR1005** on the component side of the Main Unit for 0.7 V (±0.1 V) on the voltmeter.



Circuit Diagram



	CS	D
C1007	22p	15p
C1013	3p	2p
C1017	3p	2p
C1022	2p	3p
C1029	***	1. 5p
C1180	18p	10p
C1181	3p	2p
C1196	1p	***
C1202	***	9p
L1017	10n	12n
L1026	L0022580	L0022635
R1149	15k	10k

	CS	D
D1001	HVC355B	1SV284
C1010	15p	12p
R1070	4. 7ohm	47ohm
L1057	8p	6p
L1031	0. 039u	0. 033u

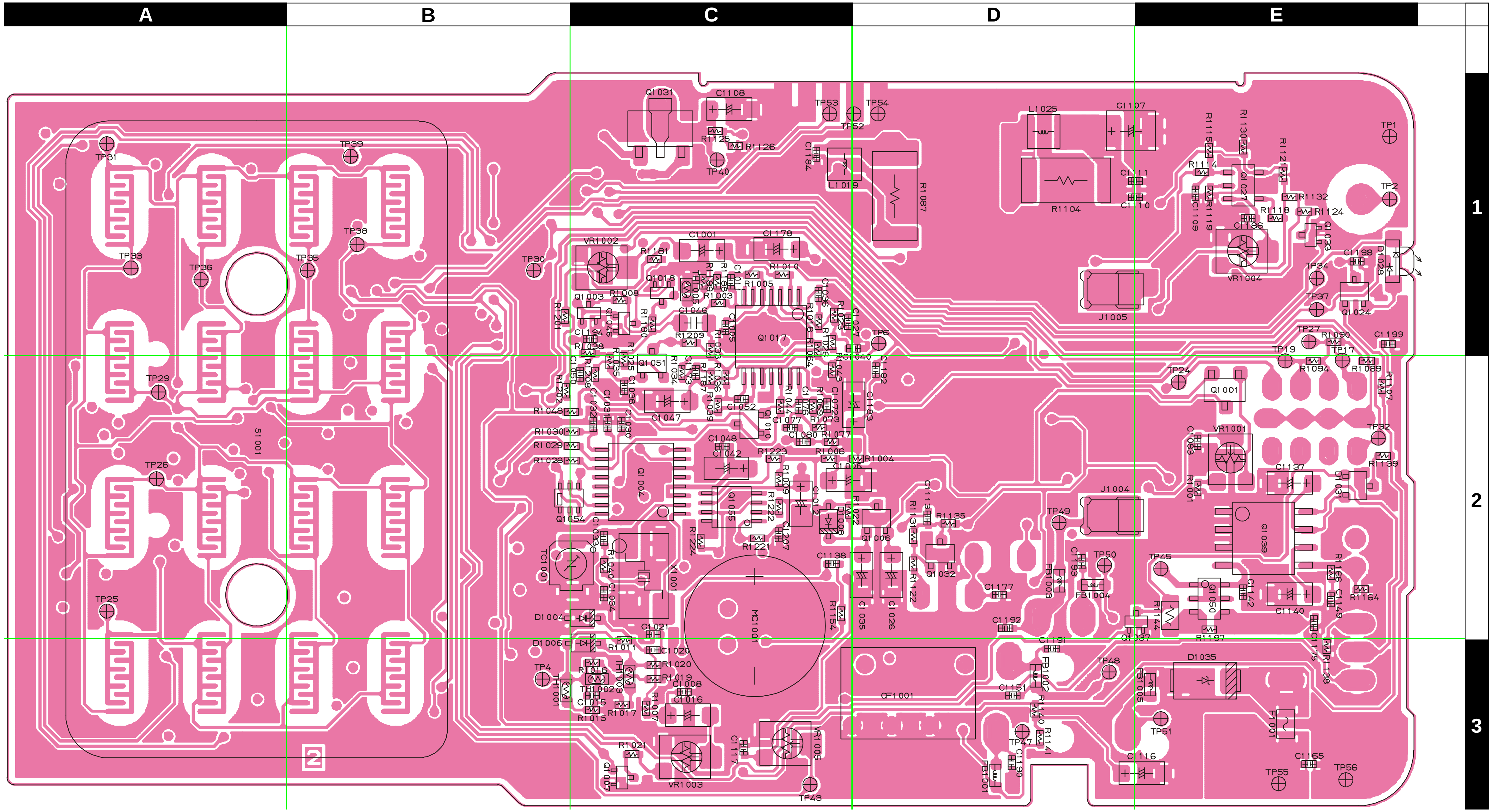
Q1036	RX SQUELCH		TX-W		TX-N	
	CLOSE	OPEN	HIGH	LOW	HIGH	LOW
1	-	-	-	-	-	-
2	-	-	-	-	-	-
3	4.87V	4.87V	4.9V	4.9V	4.9V	4.9V
4	3.22V	3.22V	3.22V	3.22V	3.22V	3.22V
5	2.07V	2.07V	2.11V	2.12V	2.15V	2.15V
6	-	-	0V	0V	-	-
7	3.22V	3.22V	3.22V	3.22V	3.21V	3.21V
8	2.18V	2.18V	2.19V	2.19V	2.2V	2.2V
9	-	-	-	-	-	-
10	-	-	-	-	-	-
11	-	-	-	-	-	-
12	-	-	-	-	-	-
13	-	-	-	-	-	-
14	-	-	-	-	-	-
15	-	-	-	-	-	-
16	-	-	-	-	-	-

Q1036 (RX SQUELCH OPEN)	
1	4.78V
2	4.4V
3	3.57V
4	4.8V
5	4.37V
6	4.5V
7	0.8V
8	0.6V
9	1.06V
10	4.81V
11	3.97V
12	0.47V
13	0.32V
14	1.91V
15	0V
16	0.93V

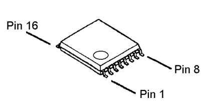
MAIN Unit

Note:

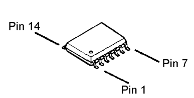
Parts Layout



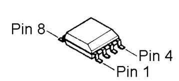
Side A



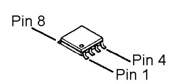
MB15A01PFV
(Q1004)



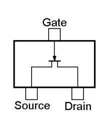
NJM2902V
(Q1017)



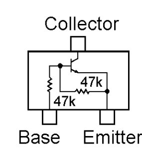
TDA7233D
(Q1039)



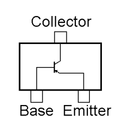
TC4W66FU
(Q1055)



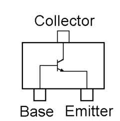
2SK209GR (XG)
(Q1001)



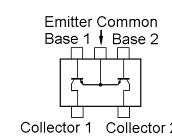
RT1N441U (N3)
(Q1003, 1007,
1018, 1033,
1037, 1046)



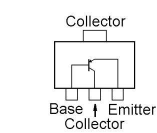
2SA1586Y (SY)
(Q1010)



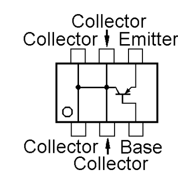
2SC4154 (LE)
(Q1006, 1024, 1051)
2SC4215Y (QY)
(Q1032)



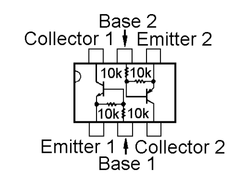
FMW1 (W1)
(Q1027)



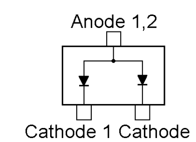
2SB1132 (BA)
(Q1031)



CPH6102 (AB)
(Q1050)

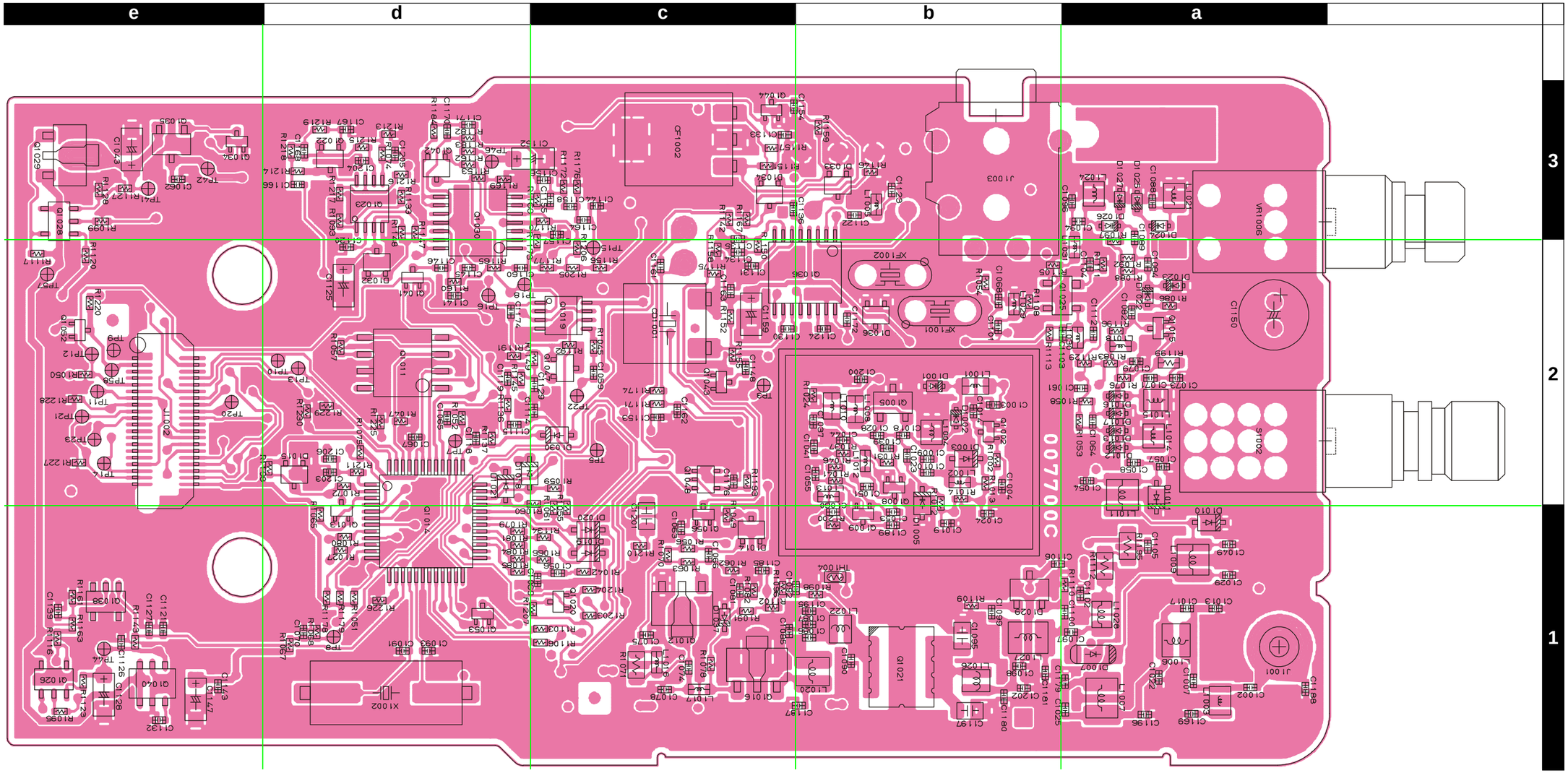


UMD3N (D3)
(Q1054)



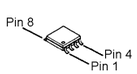
MC2846 (A4)
(D1031)

MAIN Unit



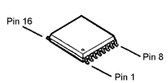
Side B

BR93LC56F
(Q1011)

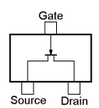


TC4W66FU
(Q1019)

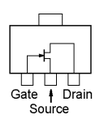
NJM12903R
(Q1023)



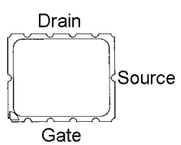
BA4116FV
(Q1036)



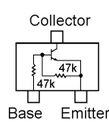
2SK508 (K52)
(Q1005)



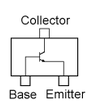
2SK2973 (K1)
(Q1016)



2SK2974
(Q1021)



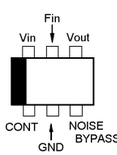
RT1N441U (N3)
(Q1002, 1034,
1041, 1043,
1044, 1052,
1053, 1056)



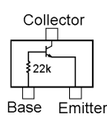
2SC4154 (LE)
(Q1022, 1047)

2SC5005 (73)
(Q1008, 1009)

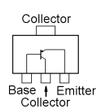
2SC5006 (24)
(Q1015)



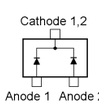
TK11235BMCL
(Q1040)



DTC124TE (05)
(Q1049)



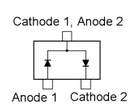
2SB1122S (BE)
(Q1029)



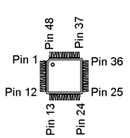
DAN235U (M)
(D1014)

1SS321 (F9)
(D1029)

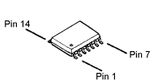
MC2848 (A6)
(D1033, 1034)



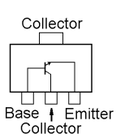
MC2850 (A7)
(D1015, 1032, 1036)



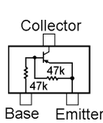
M37515M4
(Q1014)



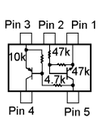
NJM2902V
(Q1030)



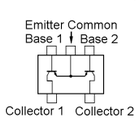
2SC3357
(Q1012)



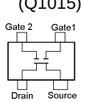
RT1P441U (P3)
(Q1013, 1020)



UMC5N (C5)
(Q1048)

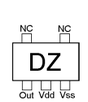


FMW1 (W1)
(Q1026, 1028)

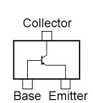


SGM2016AM (MA)
(Q1025)

DTB123EK (F12)
(Q1035)



S-80735SN (DZ)
(Q1038)



2SA1586Y (SY)
(Q1042)

Circuit Diagram

FREQUENCY RANGE

	FREQUENCY RANGE
Type_CS	440MHz ~ 470MHz
Type_D	450MHz ~ 490MHz
Type_A	400MHz ~ 430MHz

RX Squelch Close : xx
RX Squelch Close W :[xx]
RX Squelch Close N :{xx}
RX Squelch Open : (xx)
RX Squelch Open W : "xx"
RX Squelch Open N : <xx>

TX : xx
TX High W : (xx)
TX Low W : [xx]
TX High N : {xx}
TX Low N : <xx>

TYPE VALUE

	Type_CS	Type_D	Type_A
C1007	22pF	15pF	22pF
C1010	15pF	12pF	33pF
C1012	2.2uF	3.3uF	2.2uF
C1013	3pF	2pF	4pF
C1017	3pF	2pF	4pF
C1022	2pF	3pF	5pF
C1028	8pF	5pF	8pF
C1029	***	1.5pF	2pF
C1057	8pF	6pF	12pF
C1058	5pF	5pF	8pF
C1064	4pF	6pF	5pF
C1066	15pF	15pF	27pF
C1068	7pF	***	7pF
C1071	4pF	4pF	7pF
C1073	12pF	***	15pF
C1082	0.001uF	47pF	0.001uF

	Type_CS	Type_D	Type_A
C1087	22pF	22pF	33pF
C1088	3pF	3pF	5pF
C1089	10pF	5pF	10pF
C1094	4pF	4pF	9pF
C1096	3pF	3pF	10pF
C1098	***	***	5pF
C1173	0.047uF	***	0.047uF
C1180	10pF	10pF	10pF
C1181	3pF	2pF	4pF
C1182	82pF	120pF	56pF
C1195	1pF	***	1pF
C1202	10pF	9pF	10pF
D1001	HVC355B	1SV284	HVC355B
L1004	L0022395	L0022395	L0022366
L1017	10nH	10nH	12nH
L1018	10nH	82nH	10nH

	Type_CS	Type_D	Type_A
L1026	L0022580	L0022635	L0022580
L1029	0.068uH	0.033uH	0.082uH
L1031	0.039uH	0.033uH	0.039uH
L1032	***	12nH	***
R1003	47K Ω	47K Ω	27K Ω
R1006	1K Ω	2.2K Ω	1K Ω
R1008	5.8K Ω	5.8K Ω	5.8K Ω
R1009	2.2K Ω	1.5K Ω	2.2K Ω
R1021	10K Ω	5.8K Ω	6.8K Ω

	Type_CS	Type_D	Type_A
R1033	15K Ω	10K Ω	18K Ω
R1086	100K Ω	***	100K Ω
R1114	10K Ω	10K Ω	12K Ω
R1187	***	0Ω	***
R1196	470 Ω	470 Ω	220 Ω
R1221	5.6K Ω	22K Ω	5.6K Ω
R1223	4.7K Ω	3.9K Ω	4.7K Ω

Q1036 (RX SQUELCH OPEN)

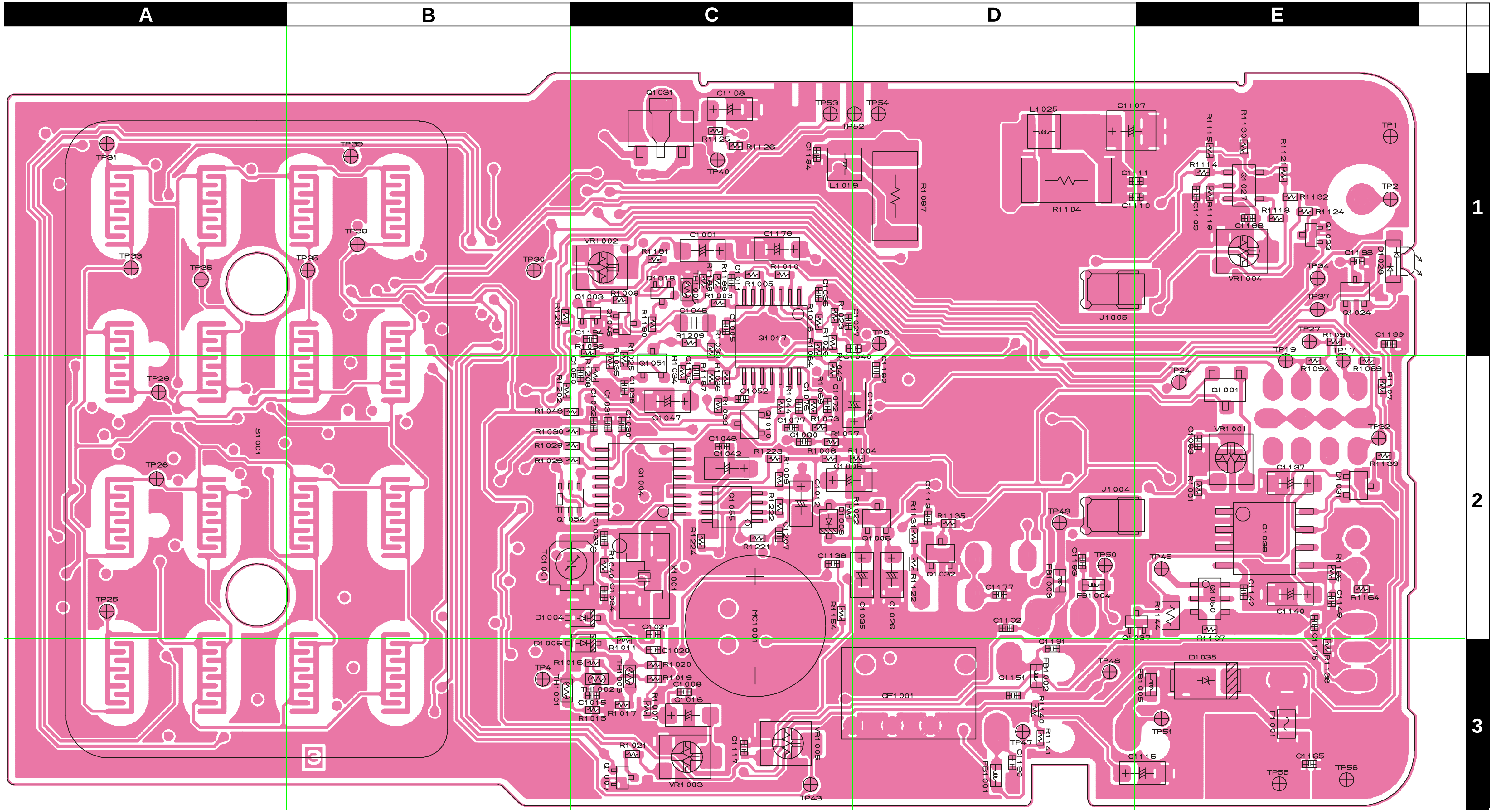
1	4.78V	9	1.06V
2	4.4V	10	4.81V
3	3.57V	11	3.97V
4	4.8V	12	0.47V
5	4.37V	13	0.32V
6	4.5V	14	1.91V
7	0.8V	15	0V
8	0.6V	16	0.93V

Q1036	RX SQUELCH CLOSE	RX SQUELCH OPEN	TX-W HIGH	TX-W LOW	TX-N HIGH	TX-N LOW
1	-	-	-	-	-	-
2	-	-	-	-	-	-
3	4.87V	4.87V	4.9V	4.9V	4.9V	4.9V
4	3.22V	3.22V	3.22V	3.22V	3.22V	3.22V
5	2.07V	2.07V	2.11V	2.12V	2.15V	2.15V
6	-	-	0V	0V	-	-
7	3.22V	3.22V	3.22V	3.22V	3.21V	3.21V
8	2.18V	2.18V	2.19V	2.19V	2.2V	2.2V
9~16	-	-	-	-	-	-

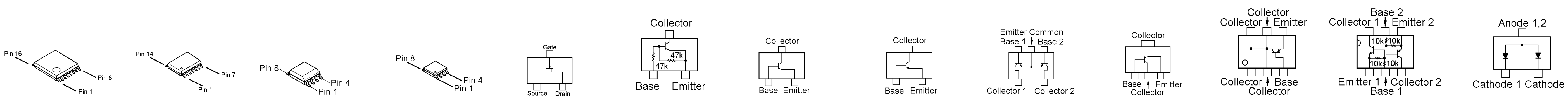
MAIN Unit (Lot. 12~)

Note:

Parts Layout

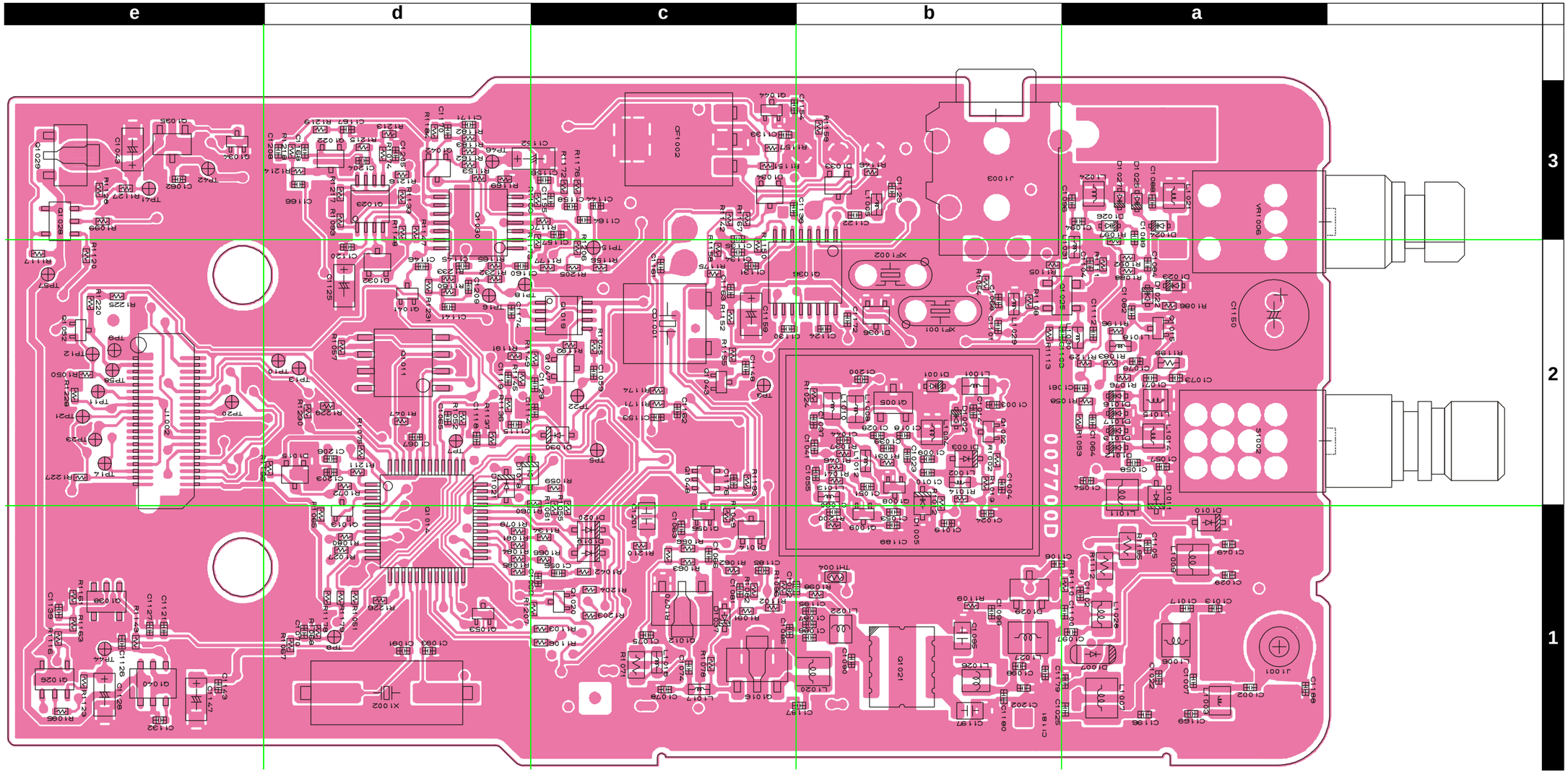


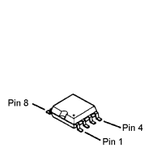
Side A



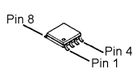
MB15A01PFV (Q1004)
NJM2902V (Q1017)
TDA7233D (Q1039)
TC4W66FU (Q1055)
2SK209GR (XG) (Q1001)
RT1N441U (N3) (Q1003, 1007, 1018, 1033, 1037, 1046)
2SA1586Y (SY) (Q1010)
2SC4154 (LE) (Q1006, 1024, 1051)
2SC4215Y (QY) (Q1032)
FMW1 (W1) (Q1027)
2SB1132 (BA) (Q1031)
CPH6102 (AB) (Q1050)
UMD3N (D3) (Q1054)
MC2846 (A4) (D1031)

MAIN Unit (Lot. 12~)



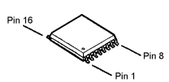


BR93LC56F
(Q1011)

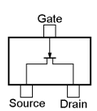


TC4W66FU
(Q1019)

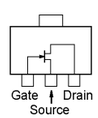
NJM12903R
(Q1023)



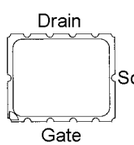
BA4116FV
(Q1036)



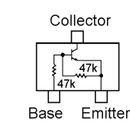
2SK508 (K52)
(Q1005)



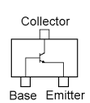
2SK2973 (K1)
(Q1016)



2SK2974
(Q1021)



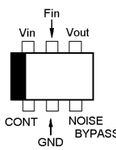
RT1N441U (N3)
(Q1002, 1034,
1041, 1043,
1044, 1052,
1053, 1056)



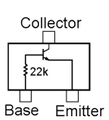
2SC4154 (LE)
(Q1022, 1047)

2SC5005 (73)
(Q1008, 1009)

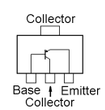
2SC5006 (24)
(Q1015)



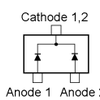
TK11235BMCL
(Q1040)



DTC124TE (05)
(Q1049)



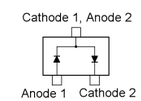
2SB1122S (BE)
(Q1029)



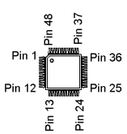
DAN235U (M)
(D1014)

1SS321 (F9)
(D1029)

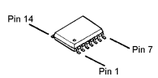
MC2848 (A6)
(D1033, 1034)



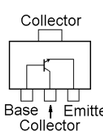
MC2850 (A7)
(D1015, 1032, 1036)



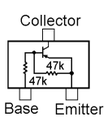
M37515M4
(Q1014)



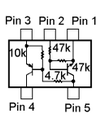
NJM2902V
(Q1030)



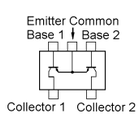
2SC3357
(Q1012)



RT1P441U (P3)
(Q1013, 1020)



UMC5N (C5)
(Q1048)



FMW1 (W1)
(Q1026, 1028)

SGM2016AM (MA)
(Q1025)

DTB123EK (F12)
(Q1035)

S-80735SN (DZ)
(Q1038)

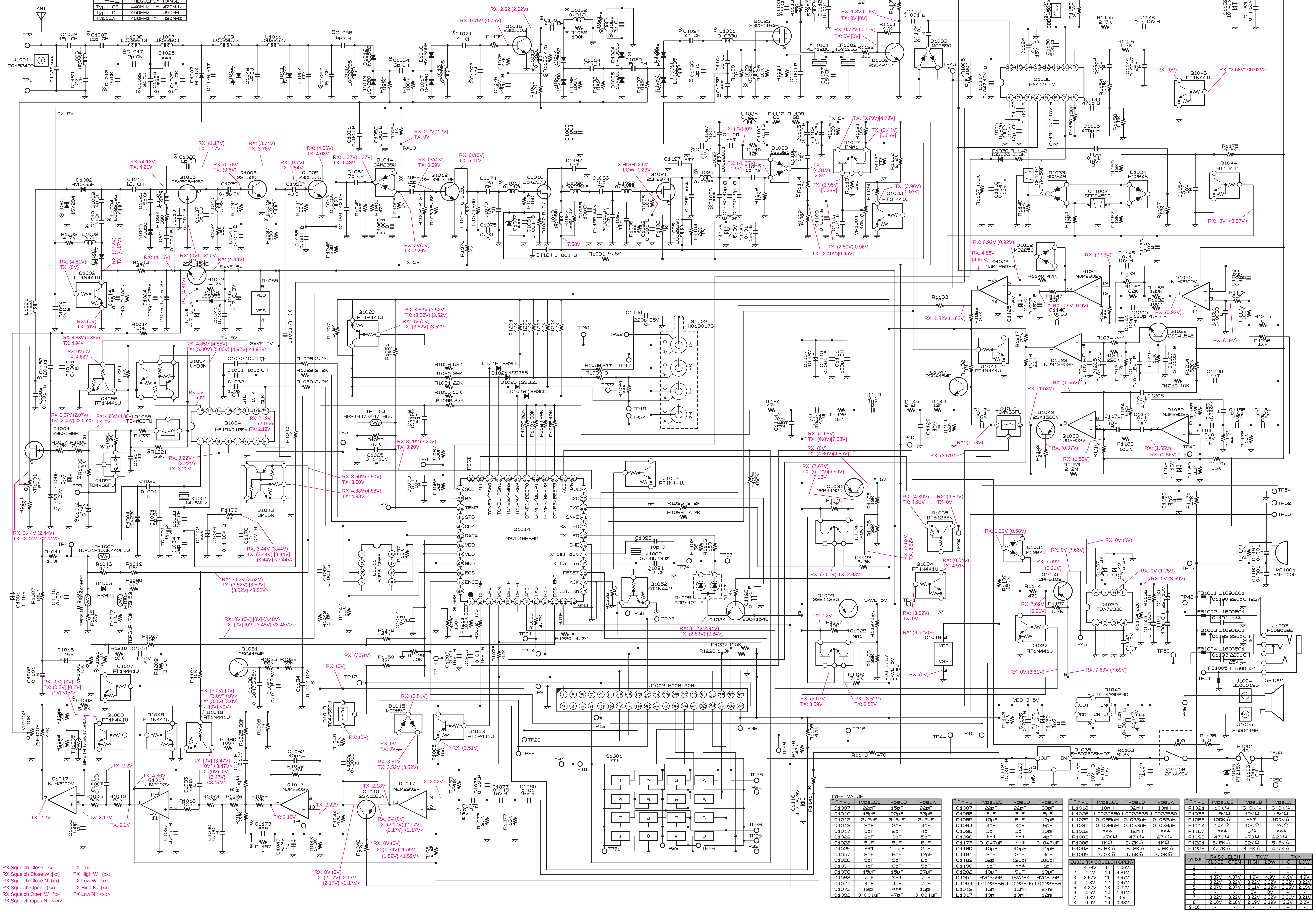
2SA1586Y (SY)
(Q1042)

Circuit Diagram

MAIN Unit (Lot. 20~)

FREQUENCY RANGE

	FREQUENCY RANGE
Type_CS	440MHz ～ 470MHz
Type_D	450MHz ～ 490MHz
Type_A	400MHz ～ 430MHz



RX Squelch Close : xx
RX Squelch Close W :[xx]
RX Squelch Close N :{xx}
RX Squelch Open : (xx)
RX Squelch Open W : "xx"
RX Squelch Open N : <xx>

TX : xx
TX High W : (xx)
TX Low W : [xx]
TX High N : {xx}
TX Low N : <xx>

TYPE VALUE

	Type_CS	Type_D	Type_A
C1007	22pF	15pF	22pF
C1010	15pF	22pF	33pF
C1012	2.2uF	3.3uF	2.2uF
C1013	3pF	2pF	4pF
C1017	3pF	2pF	4pF
C1022	2pF	3pF	5pF
C1028	5pF	5pF	8pF
C1029	***	1.5pF	2pF
C1057	8pF	6pF	12pF
C1058	5pF	5pF	8pF
C1064	4pF	6pF	5pF
C1066	15pF	15pF	27pF
C1068	7pF	***	7pF
C1071	4pF	4pF	7pF
C1073	12pF	***	15pF
C1082	0.001uF	47pF	0.001uF

	Type_CS	Type_D	Type_A
C1087	22pF	22pF	33pF
C1088	3pF	3pF	5pF
C1089	10pF	6pF	10pF
C1094	4pF	4pF	9pF
C1096	3pF	3pF	10pF
C1098	***	***	4pF
C1173	0.047uF	***	0.047uF
C1180	10pF	10pF	10pF
C1181	3pF	2pF	4pF
C1182	82pF	120pF	100pF
C1196	1pF	***	1pF
C1202	10pF	9pF	10pF
D1001	HVC355B	1SV284	HVC355B
L1004	L0022366	L0022395	L0022366
L1012	15nH	15nH	27nH
L1017	10nH	10nH	12nH

	Type_CS	Type_D	Type_A
L1018	10nH	82nH	10nH
L1026	L0022580	L0022635	L0022580
L1029	0.068uH	0.033uH	0.082uH
L1031	0.039uH	0.033uH	0.039uH
L1032	***	12nH	***
R1003	47KΩ	47KΩ	27KΩ
R1006	1KΩ	2.2KΩ	1KΩ
R1008	6.8KΩ	6.8KΩ	5.6KΩ
R1009	2.2KΩ	1.5KΩ	2.2KΩ

Q1036 (RX SQUELCH OPEN)			
1	4.78V	9	1.06V
2	4.4V	10	4.81V
3	3.57V	11	3.97V
4	4.8V	12	0.47V
5	4.37V	13	0.32V
6	4.5V	14	1.91V
7	0.8V	15	0V
8	0.6V	16	0.93V

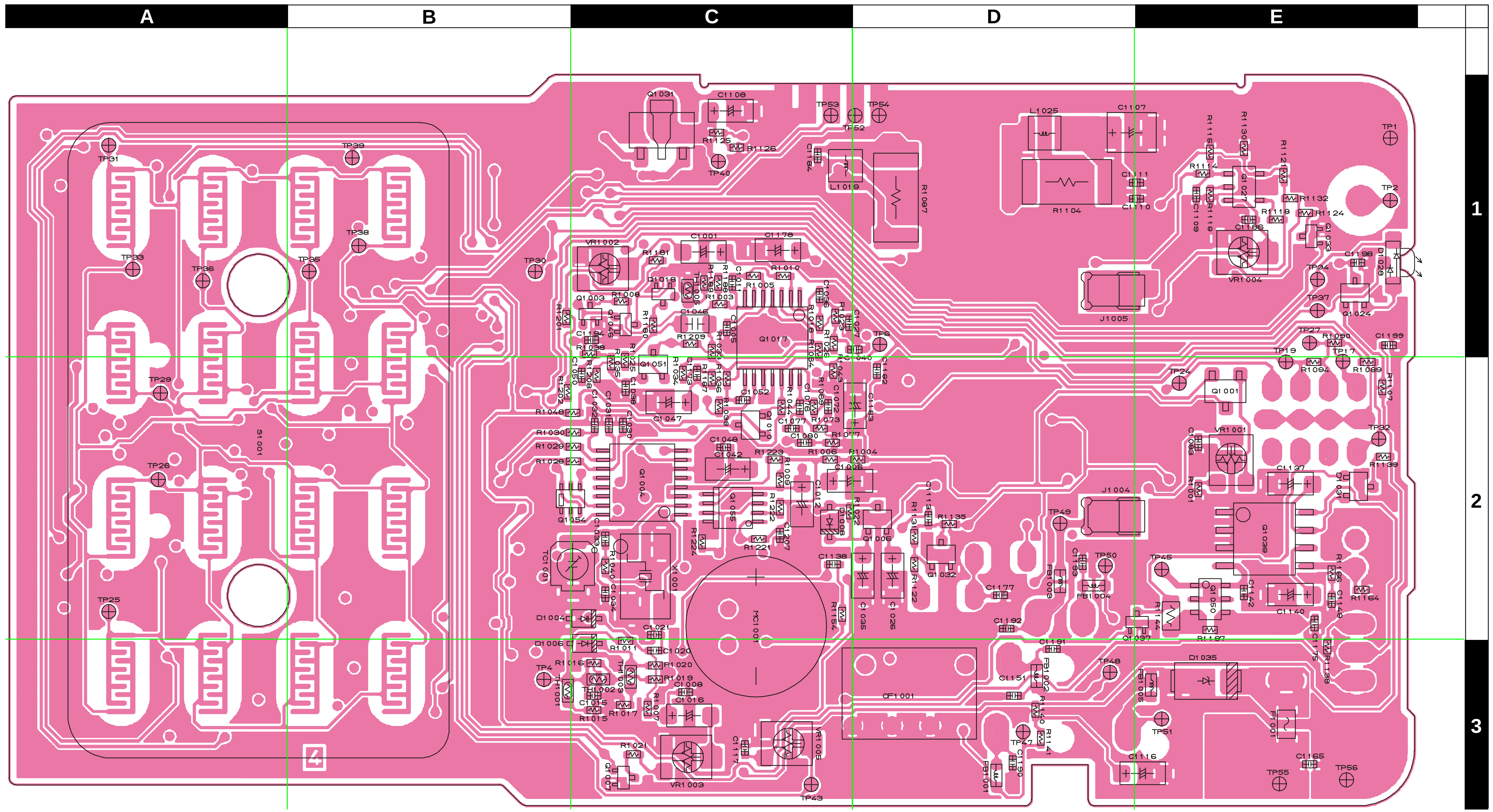
	Type_CS	Type_D	Type_A
R1021	10KΩ	6.8KΩ	6.8KΩ
R1033	15KΩ	10KΩ	18KΩ
R1086	100KΩ	***	100KΩ
R1114	10KΩ	10KΩ	12KΩ
R1187	***	0Ω	***
R1196	470Ω	470Ω	220Ω
R1221	5.6KΩ	22KΩ	5.6KΩ
R1223	4.7KΩ	3.9KΩ	4.7KΩ

Q1036	RX SQUELCH		TX-W		TX-N	
	CLOSE	OPEN	HIGH	LOW	HIGH	LOW
1	-	-	-	-	-	-
2	-	-	-	-	-	-
3	4.87V	4.87V	4.9V	4.9V	4.9V	4.9V
4	3.22V	3.22V	3.22V	3.22V	3.22V	3.22V
5	2.07V	2.07V	2.11V	2.12V	2.15V	2.15V
6	-	-	0V	0V	-	-
7	3.22V	3.22V	3.22V	3.22V	3.21V	3.21V
8	2.18V	2.18V	2.19V	2.19V	2.2V	2.2V
9~16	-	-	-	-	-	-

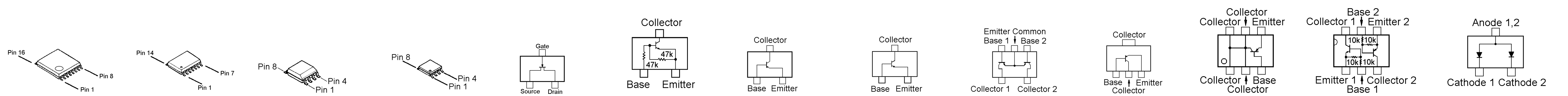
MAIN Unit (Lot. 20~)

Note:

Parts Layout

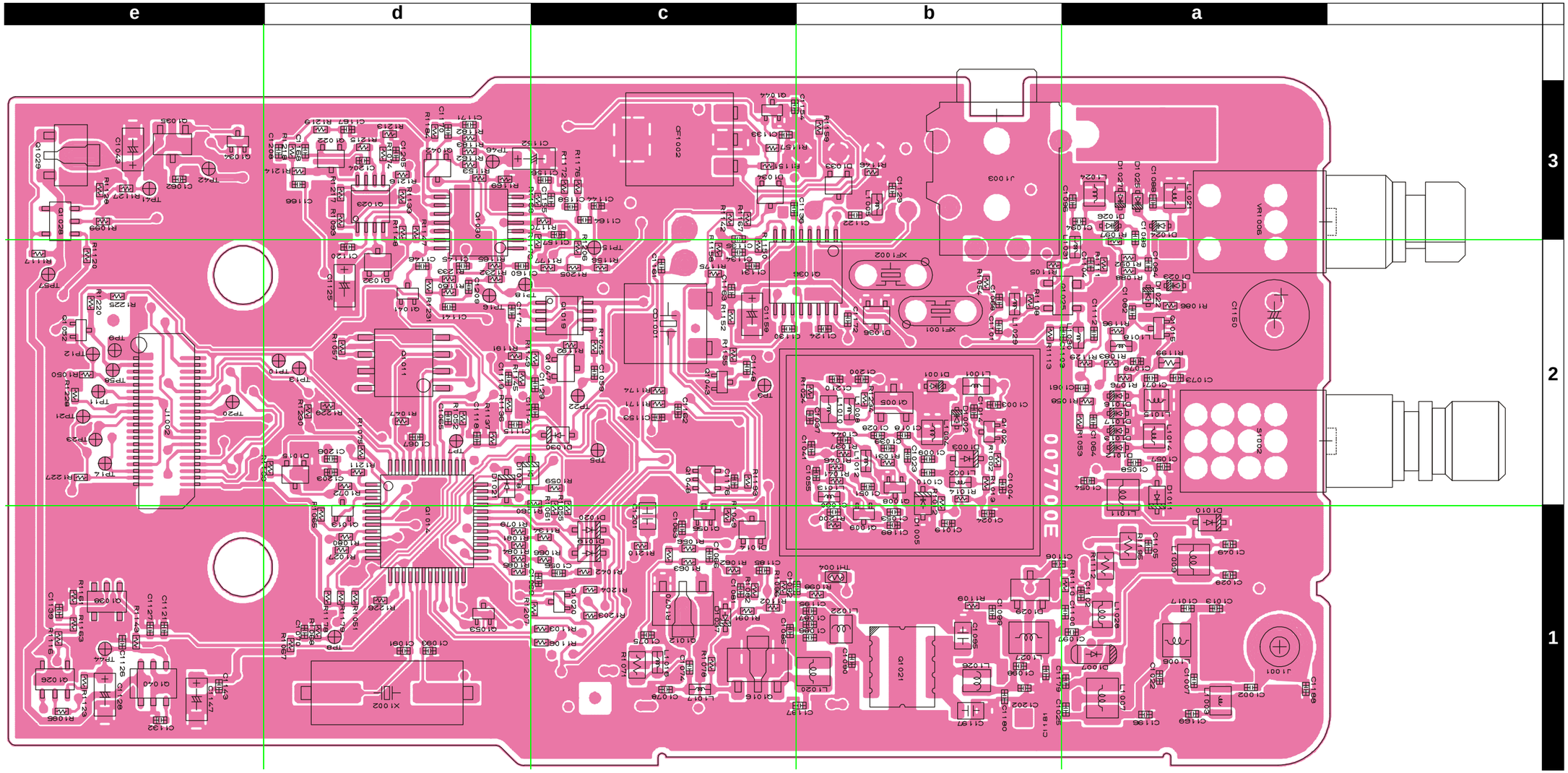


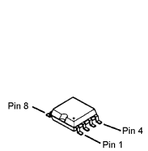
Side A



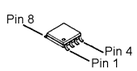
MB15A01PFV (Q1004) | NJM2902V (Q1017) | TDA7233D (Q1039) | TC4W66FU (Q1055) | 2SK209GR (XG) (Q1001) | RT1N441U (N3) (Q1003, 1007, 1018, 1033, 1037, 1046) | 2SA1586Y (SY) (Q1010) | 2SC4154 (LE) (Q1006, 1024, 1051) 2SC4215Y (QY) (Q1032) | FMW1 (W1) (Q1027) | 2SB1132 (BA) (Q1031) | CPH6102 (AB) (Q1050) | UMD3N (D3) (Q1054) | MC2846 (A4) (D1031)

MAIN Unit (Lot. 20~)



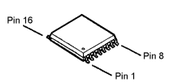


BR93LC56F
(Q1011)

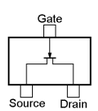


TC4W66FU
(Q1019)

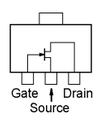
NJM12903R
(Q1023)



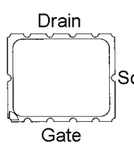
BA4116FV
(Q1036)



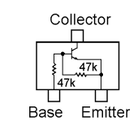
2SK508 (K52)
(Q1005)



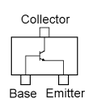
2SK2973 (K1)
(Q1016)



2SK2974
(Q1021)



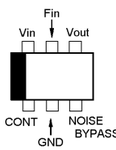
RT1N441U (N3)
(Q1002, 1034, 1041, 1043, 1044, 1052, 1053, 1056)



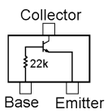
2SC4154 (LE)
(Q1022, 1047)

2SC5005 (73)
(Q1008, 1009)

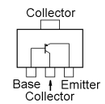
2SC5006 (24)
(Q1015)



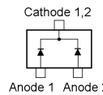
TK11235CMCL
(Q1040)



DTC124TE (05)
(Q1049)



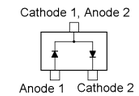
2SB1122S (BE)
(Q1029)



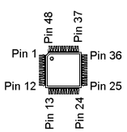
DAN235U (M)
(D1014)

1SS321 (F9)
(D1029)

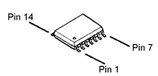
MC2848 (A6)
(D1033, 1034)



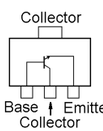
MC2850 (A7)
(D1015, 1032, 1036)



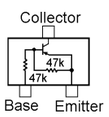
M37515M4
(Q1014)



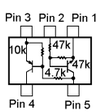
NJM2902V
(Q1030)



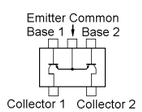
2SC3357
(Q1012)



RT1P441U (P3)
(Q1013, 1020)

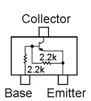


UMC5N (C5)
(Q1048)

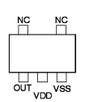


FMW1 (W1)
(Q1026, 1028)

SGM2016AM (MA)
(Q1025)



DTB123EK (F12)
(Q1035)



S-80835CNMC
(Q1038)

2SA1586Y (SY)
(Q1042)

Parts List

REF.	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT.	SIDE	LAY ADR
	PCB with Components					CB1824001	VERSION D			
	PCB with Components					CB1824002	CS VERSION			
	PCB with Components					CB1824003	VERSION A			
	Printed Circuit Board					FR007700C		1-		
	Printed Circuit Board					FR007700D		12-		
	Printed Circuit Board					FR007700E		20-		
C 1001	CHIP TA.CAP.	1uF	16V		TESVA1C105M1-8R	K78120009		1-	A	C1
C 1002	CHIP CAP.	15pF	50V	CH	GRM36CH150J50PT	K22178216		1-	B	a1
C 1003	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	b2
C 1004	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	b2
C 1005	CHIP CAP.	150pF	50V	CH	GRM36CH151J50PT	K22178240		1-	A	C1
C 1006	CHIP TA.CAP.	0.1uF	20V		TEMSVA21D104M-8R	K78130020		1-	A	C2
C 1007	CHIP CAP.	22pF	50V	CH	GRM36CH220J50PT	K22178220	CS VERSION	1-	B	a1
C 1007	CHIP CAP.	22pF	50V	CH	GRM36CH220J50PT	K22178220	VERSION A	12-	B	a1
C 1007	CHIP CAP.	15pF	50V	CH	GRM36CH150J50PT	K22178216	VERSION D	1-	B	a1
C 1008	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	A	C3
C 1009	CHIP CAP.	4pF	50V	CH	GRM36CH040C50PT	K22178206		1-	B	b2
C 1010	CHIP CAP.	15pF	50V	CH	GRM36CH150J50PT	K22178216	CS VERSION	1-	B	b2
C 1010	CHIP CAP.	33pF	50V	CH	GRM36CH330J50PT	K22178224	VERSION A	12-	B	b2
C 1010	CHIP CAP.	12pF	50V	CH	GRM36CH120J50PT	K22178214	VERSION D	1-	B	b2
C 1010	CHIP CAP.	22pF	50V	CH	GRM36CH220J50PT	K22178220	VERSION D	14-	B	b2
C 1011	CHIP CAP.	0.0033uF	50V	B	GRM36B332K50PT	K22178815		1-	A	C1
C 1012	CHIP TA.CAP.	3.3uF	6.3V		TESVA0J335M1-8R	K78080021		1-7	A	C2
C 1012	CHIP TA.CAP.	2.2uF	6.3V		TESVA0J225M1-8R	K78080009	CS VERSION	8-	A	C2
C 1012	CHIP TA.CAP.	2.2uF	6.3V		TESVA0J225M1-8R	K78080009	VERSION A	12-	A	C2
C 1012	CHIP TA.CAP.	3.3uF	6.3V		TESVA0J335M1-8R	K78080021	VERSION D	8-	A	C2
C 1013	CHIP CAP.	3pF	50V	CJ	GRM36CJ030C50PT	K22178205	CS VERSION	1-	B	a1
C 1013	CHIP CAP.	4pF	50V	CH	GRM36CH040C50PT	K22178206	VERSION A	12-	B	a1
C 1013	CHIP CAP.	2pF	50V	CK	GRM36CK020C50PT	K22178204	VERSION D	1-	B	a1
C 1014	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	b2
C 1015	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	A	C3
C 1016	CHIP TA.CAP.	1uF	16V		TESVA1C105M1-8R	K78120009		1-	A	C3
C 1017	CHIP CAP.	3pF	50V	CJ	GRM36CJ030C50PT	K22178205	CS VERSION	1-	B	a1
C 1017	CHIP CAP.	4pF	50V	CH	GRM36CH040C50PT	K22178206	VERSION A	12-	B	a1
C 1017	CHIP CAP.	2pF	50V	CK	GRM36CK020C50PT	K22178204	VERSION D	1-	B	a1
C 1017	CHIP CAP.	3pF	50V	CJ	GRM36CJ030C50PT	K22178205	VERSION D	16-	B	a1
C 1018	CHIP CAP.	12pF	50V	CH	GRM36CH120J50PT	K22178214		1-	B	b2
C 1019	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	b1
C 1020	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	A	C3
C 1021	CHIP CAP.	5pF	50V	CH	GRM36CH050C50PT	K22178207		1-	A	C2
C 1022	CHIP CAP.	2pF	50V	CK	GRM36CK020C50PT	K22178204	CS VERSION	1-	B	a1
C 1022	CHIP CAP.	5pF	50V	CH	GRM36CH050C50PT	K22178207	VERSION A	12-	B	a1
C 1022	CHIP CAP.	3pF	50V	CJ	GRM36CJ030C50PT	K22178205	VERSION D	1-	B	a1
C 1023	CHIP CAP.	0.5pF	50V	CK	GRM36CK0R5B50PT	K22178285		1-	B	b2
C 1024	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203		1-	B	b1
C 1026	CHIP TA.CAP.	4.7uF	6.3V		TEMSVA0J475M-8R	K78080017		1-	A	D2
C 1027	CHIP CAP.	470pF	50V	B	GRM36B471K50PT	K22178805		1-	A	C1
C 1028	CHIP CAP.	5pF	50V	CH	GRM36CH050C50PT	K22178207		1-11	B	b2
C 1028	CHIP CAP.	5pF	50V	CH	GRM36CH050C50PT	K22178207	CS VERSION	12-	B	b2
C 1028	CHIP CAP.	8pF	50V	CH	GRM36CH080D50PT	K22178210	VERSION A	12-	B	b2
C 1028	CHIP CAP.	5pF	50V	CH	GRM36CH050C50PT	K22178207	VERSION D	12-	B	b2
C 1029	CHIP CAP.	2pF	50V	CK	GRM36CK020C50PT	K22178204	VERSION A	12-	B	a1
C 1029	CHIP CAP.	1.5pF	50V	CK	GRM36CK1R5C50PT	K22178203	VERSION D	1-	B	a1
C 1030	CHIP CAP.	100pF	50V	CH	GRM36CH101J50PT	K22178236		1-	A	C2
C 1031	CHIP CAP.	100pF	50V	CH	GRM36CH101J50PT	K22178236		1-	A	C2
C 1032	CHIP CAP.	100pF	50V	CH	GRM36CH101J50PT	K22178236		1-	A	C2
C 1033	CHIP CAP.	18pF	50V	CH	GRM36CH180J50PT	K22178218		1-	A	C2
C 1034	CHIP CAP.	39pF	50V	CH	GRM36CH390J50PT	K22178226		1-	A	C2
C 1035	CHIP TA.CAP.	4.7uF	6.3V		TEMSVA0J475M-8R	K78080017		1-	A	D2
C 1036	CHIP CAP.	680pF	50V	B	GRM36B681K50PT	K22178807		1-	A	C1
C 1037	CHIP CAP.	3pF	50V	CJ	GRM36CJ030C50PT	K22178205		1-	B	b2
C 1038	CHIP CAP.	0.0047uF	25V	B	GRM36B472K25PT	K22148830		1-	A	C2
C 1039	CHIP CAP.	0.5pF	50V	CK	GRM36CK0R5B50PT	K22178285		1-	B	b2
C 1040	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	A	C1
C 1041	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	b2
C 1042	CHIP TA.CAP.	10uF	6.3V		TEMSVA0J106M-8R	K78080027		1-15	A	C2
C 1042	CHIP TA.CAP.	10uF	6.3V		TEMSVA0J106M-8R	K78080027		18-	A	C2

MAIN Unit

REF.	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT.	SIDE	LAY ADR
C 1043	CHIP TA.CAP.	4.7uF	6.3V		TEMSVA0J475M-8R	K78080017		1-	B	e3
C 1044	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	b2
C 1046	CHIP CAP.	1uF	10V	B	GRM40B105K10PT	K22100802		1-	A	C1
C 1047	CHIP TA.CAP.	10uF	6.3V		TEMSVA0J106M-8R	K78080027		1-	A	C2
C 1048	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	A	C2
C 1049	CHIP CAP.	3pF	50V	CJ	GRM36CJ030C50PT	K22178205		1-	B	a1
C 1050	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	C2
C 1051	CHIP CAP.	2pF	50V	CK	GRM36CK020C50PT	K22178204		1-	B	b2
C 1052	CHIP CAP.	10pF	50V	CH	GRM36CH100D50PT	K22178212		1-	A	C2
C 1053	CHIP CAP.	4pF	50V	CH	GRM36CH040C50PT	K22178206		1-	B	b1
C 1055	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	b2
C 1056	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	c1
C 1057	CHIP CAP.	8pF	50V	CH	GRM36CH080D50PT	K22178210	CS VERSION	1-	B	a2
C 1057	CHIP CAP.	12pF	50V	CH	GRM36CH120J50PT	K22178214	VERSION A	12-	B	a2
C 1057	CHIP CAP.	6pF	50V	CH	GRM36CH060D50PT	K22178208	VERSION D	1-	B	a2
C 1058	CHIP CAP.	5pF	50V	CH	GRM36CH050C50PT	K22178207		1-11	B	a2
C 1058	CHIP CAP.	5pF	50V	CH	GRM36CH050C50PT	K22178207	CS VERSION	12-	B	a2
C 1058	CHIP CAP.	8pF	50V	CH	GRM36CH080D50PT	K22178210	VERSION A	12-	B	a2
C 1058	CHIP CAP.	5pF	50V	CH	GRM36CH050C50PT	K22178207	VERSION D	12-	B	a2
C 1059	CHIP CAP.	0.0018uF	50V	B	GRM36B182K50PT	K22178812		1-	B	c2
C 1060	CHIP CAP.	7pF	50V	CH	GRM36CH070D50PT	K22178209		1-	B	b1
C 1061	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	a2
C 1062	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	e3
C 1063	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	c1
C 1064	CHIP CAP.	4pF	50V	CH	GRM36CH040C50PT	K22178206		1-7	B	a2
C 1064	CHIP CAP.	4pF	50V	CH	GRM36CH040C50PT	K22178206	CS VERSION	8-	B	a2
C 1064	CHIP CAP.	5pF	50V	CH	GRM36CH050C50PT	K22178207	VERSION A	12-	B	a2
C 1064	CHIP CAP.	7pF	50V	CH	GRM36CH070D50PT	K22178209	VERSION A	20-	B	a2
C 1064	CHIP CAP.	6pF	50V	CH	GRM36CH060D50PT	K22178208	VERSION D	8-	B	a2
C 1065	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	d2
C 1066	CHIP CAP.	15pF	50V	CH	GRM36CH150J50PT	K22178216		1-11	B	c1
C 1066	CHIP CAP.	15pF	50V	CH	GRM36CH150J50PT	K22178216	CS VERSION	12-	B	c1
C 1066	CHIP CAP.	27pF	50V	CH	GRM36CH270J50PT	K22178222	VERSION A	12-	B	c1
C 1066	CHIP CAP.	15pF	50V	CH	GRM36CH150J50PT	K22178216	VERSION D	12-	B	c1
C 1067	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	d2
C 1068	CHIP CAP.	7pF	50V	CH	GRM36CH070D50PT	K22178209		1-3	B	b2
C 1068	CHIP CAP.	7pF	50V	CH	GRM36CH070D50PT	K22178209	CS VERSION	8-	B	b2
C 1068	CHIP CAP.	7pF	50V	CH	GRM36CH070D50PT	K22178209	VERSION A	12-	B	b2
C 1069	CHIP CAP.	0.0047uF	25V	B	GRM36B472K25PT	K22148830		1-	B	c1
C 1070	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	d1
C 1071	CHIP CAP.	4pF	50V	CH	GRM36CH040C50PT	K22178206		1-11	B	a2
C 1071	CHIP CAP.	4pF	50V	CH	GRM36CH040C50PT	K22178206	CS VERSION	12-	B	a2
C 1071	CHIP CAP.	7pF	50V	CH	GRM36CH070D50PT	K22178209	VERSION A	12-	B	a2
C 1071	CHIP CAP.	4pF	50V	CH	GRM36CH040C50PT	K22178206	VERSION D	12-	B	a2
C 1072	CHIP CAP.	0.015uF	16V	B	GRM36B153K16PT	K22128807		1-	A	C2
C 1073	CHIP CAP.	12pF	50V	CH	GRM36CH120J50PT	K22178214		1-3	B	a2
C 1073	CHIP CAP.	12pF	50V	CH	GRM36CH120J50PT	K22178214	CS VERSION	8-	B	a2
C 1073	CHIP CAP.	15pF	50V	CH	GRM36CH150J50PT	K22178216	VERSION A	12-	B	a2
C 1073	CHIP CAP.	12pF	50V	CH	GRM36CH120J50PT	K22178214	VERSION A	20-	B	a2
C 1074	CHIP CAP.	12pF	50V	CH	GRM36CH120J50PT	K22178214		1-	B	c1
C 1075	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	c1
C 1076	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	A	C2
C 1077	CHIP CAP.	0.015uF	16V	B	GRM36B153K16PT	K22128807		1-	A	C2
C 1078	CHIP CAP.	18pF	50V	CH	GRM36CH180J50PT	K22178218		1-	B	c1
C 1079	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203		1-	B	a2
C 1080	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	C2
C 1081	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	c1
C 1082	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	a2
C 1082	CHIP CAP.	47pF	50V	CH	GRM36CH470J50PT	K22178228		4-7	B	a2
C 1082	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809	CS VERSION	8-	B	a2
C 1082	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809	VERSION A	12-	B	a2
C 1082	CHIP CAP.	47pF	50V	CH	GRM36CH470J50PT	K22178228	VERSION D	8-	B	a2
C 1083	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	A	E2
C 1084	CHIP CAP.	10pF	50V	CH	GRM36CH100D50PT	K22178212		1-	B	a2
C 1085	CHIP CAP.	10pF	50V	CH	GRM36CH100D50PT	K22178212		1-	B	c1
C 1086	CHIP CAP.	15pF	50V	CH	GRM36CH150J50PT	K22178216		1-	B	b1
C 1087	CHIP CAP.	22pF	50V	CH	GRM36CH220J50PT	K22178220		1-11	B	b1

REF.	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT.	SIDE	LAY ADR
C 1087	CHIP CAP.	22pF	50V	CH	GRM36CH220J50PT	K22178220	CS VERSION	12-	B	b1
C 1087	CHIP CAP.	33pF	50V	CH	GRM36CH330J50PT	K22178224	VERSION A	12-	B	b1
C 1087	CHIP CAP.	22pF	50V	CH	GRM36CH220J50PT	K22178220	VERSION D	12-	B	b1
C 1088	CHIP CAP.	3pF	50V	CJ	GRM36CJ030C50PT	K22178205		1-7	B	a3
C 1088	CHIP CAP.	5pF	50V	CH	GRM36CH050C50PT	K22178207	CS VERSION	8-	B	a3
C 1088	CHIP CAP.	5pF	50V	CH	GRM36CH050C50PT	K22178207	VERSION A	12-	B	a3
C 1088	CHIP CAP.	3pF	50V	CJ	GRM36CJ030C50PT	K22178205	VERSION D	8-	B	a3
C 1089	CHIP CAP.	10pF	50V	CH	GRM36CH100D50PT	K22178212		1-7	B	a2
C 1089	CHIP CAP.	10pF	50V	CH	GRM36CH100D50PT	K22178212	CS VERSION	8-	B	a2
C 1089	CHIP CAP.	10pF	50V	CH	GRM36CH100D50PT	K22178212	VERSION A	12-	B	a2
C 1089	CHIP CAP.	6pF	50V	CH	GRM36CH060D50PT	K22178208	VERSION D	8-	B	a2
C 1091	CHIP CAP.	10pF	50V	CH	GRM36CH100D50PT	K22178212		1-	B	d1
C 1092	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	c1
C 1093	CHIP CAP.	10pF	50V	CH	GRM36CH100D50PT	K22178212		1-	B	d1
C 1094	CHIP CAP.	4pF	50V	CH	GRM36CH040C50PT	K22178206		1-11	B	a3
C 1094	CHIP CAP.	4pF	50V	CH	GRM36CH040C50PT	K22178206	CS VERSION	12-	B	a3
C 1094	CHIP CAP.	9pF	50V	CH	GRM36CH090D50PT	K22178211	VERSION A	12-	B	a3
C 1094	CHIP CAP.	4pF	50V	CH	GRM36CH040C50PT	K22178206	VERSION D	12-	B	a3
C 1096	CHIP CAP.	3pF	50V	CJ	GRM36CJ030C50PT	K22178205		1-11	B	a3
C 1096	CHIP CAP.	3pF	50V	CJ	GRM36CJ030C50PT	K22178205	CS VERSION	12-	B	a3
C 1096	CHIP CAP.	10pF	50V	CH	GRM36CH100D50PT	K22178212	VERSION A	12-	B	a3
C 1096	CHIP CAP.	3pF	50V	CJ	GRM36CJ030C50PT	K22178205	VERSION D	12-	B	a3
C 1097	CHIP CAP.	100pF	50V	CH	GRM36CH101J50PT	K22178236		1-	B	a1
C 1098	CHIP CAP.	4pF	50V	CH	GRM36CH040C50PT	K22178206	VERSION A	12-	B	b1
C 1099	CHIP CAP.	1pF	50V	CK	GRM36CK010C50PT	K22178202		1-	B	b1
C 1101	CHIP CAP.	3pF	50V	CJ	GRM36CJ030C50PT	K22178205		1-	B	b2
C 1102	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	a1
C 1103	CHIP CAP.	15pF	50V	CH	GRM36CH150J50PT	K22178216		1-	B	b2
C 1104	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	a2
C 1105	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	a1
C 1106	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	b1
C 1107	CHIP TA.CAP.	10uF	16V		TEMSVB21C106M-8R	K78120025		1-	A	D1
C 1108	CHIP TA.CAP.	10uF	6.3V		TEMSVA0J106M-8R	K78080027		1-	A	C1
C 1109	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	A	E1
C 1110	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	A	D1
C 1111	CHIP CAP.	100pF	50V	CH	GRM36CH101J50PT	K22178236		1-	A	D1
C 1112	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	a2
C 1113	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	A	D2
C 1114	CHIP CAP.	0.0047uF	25V	B	GRM36B472K25PT	K22148830		1-	B	c2
C 1115	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	d2
C 1116	CHIP TA.CAP.	4.7uF	6.3V		TEMSVA0J475M-8R	K78080017		1-	A	E3
C 1117	CHIP CAP.	0.047uF	10V	B	GRM36B473K10PT	K22108801		1-	A	C3
C 1118	CHIP CAP.	0.047uF	10V	B	GRM36B473K10PT	K22108801		1-	B	d2
C 1119	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	d2
C 1120	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	d2
C 1120	CHIP CAP.	0.022uF	16V	B	GRM36B223K16PT	K22128806		12-	B	d2
C 1121	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	e1
C 1122	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	b3
C 1123	CHIP CAP.	12pF	50V	CH	GRM36CH120J50PT	K22178214		1-	B	b3
C 1124	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	b2
C 1125	CHIP TA.CAP.	1uF	16V		TESVA1C105M1-8R	K78120009		1-	B	d2
C 1126	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	e1
C 1127	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	e1
C 1128	CHIP TA.CAP.	4.7uF	6.3V		TEMSVA0J475M-8R	K78080017		1-	B	e1
C 1129	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	c2
C 1130	CHIP CAP.	56pF	50V	CH	GRM36CH560J50PT	K22178230		1-	B	c2
C 1131	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	c2
C 1132	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	e1
C 1133	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	c3
C 1134	CHIP CAP.	470pF	50V	B	GRM36B471K50PT	K22178805		1-	B	c2
C 1135	CHIP CAP.	470pF	50V	B	GRM36B471K50PT	K22178805		1-	B	c2
C 1136	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c3
C 1137	CHIP TA.CAP.	2.2uF	6.3V		TESVA0J225M1-8R	K78080009		1-	A	E2
C 1138	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	C2
C 1139	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	e1
C 1139	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		11-	B	e1
C 1140	CHIP TA.CAP.	4.7uF	6.3V		TEMSVA0J475M-8R	K78080017		1-	A	E2

MAIN Unit

REF.	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT.	SIDE	LAY ADR
C 1141	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	d2
C 1141	CHIP CAP.	100pF	50V	CH	GRM36CH101J50PT	K22178236		12-	B	d2
C 1142	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	A	E2
C 1143	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	e1
C 1144	CHIP CAP.	0.0047uF	25V	B	GRM36B472K25PT	K22148830		1-	B	c3
C 1145	CHIP CAP.	0.022uF	16V	B	GRM36B223K16PT	K22128806		1-	B	d2
C 1145	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		12-	B	d2
C 1146	CHIP CAP.	0.0033uF	50V	B	GRM36B332K50PT	K22178815		1-	B	d2
C 1147	CHIP TA.CAP.	4.7uF	16V		TEMSVA1C475M-8R	K78120031		1-	B	e1
C 1148	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	c2
C 1149	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	A	E2
C 1150	AL.ELECTRO.CAP.	220uF	10V		SMG1AVB221M 220UF	K40109027		1-	B	a2
C 1151	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203		1-7	A	D3
C 1151	CHIP CAP.	100pF	50V	CH	GRM36CH101J50PT	K22178236	CS VERSION	8-11	A	D3
C 1151	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203	VERSION D	8-11	A	D3
C 1151	CHIP CAP.	100pF	50V	CH	GRM36CH101J50PT	K22178236		12-	A	D3
C 1152	CHIP TA.CAP.	1uF	16V		TESVA1C105M1-8R	K78120009		1-	B	c3
C 1153	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	c2
C 1154	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	c3
C 1155	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c3
C 1156	CHIP CAP.	0.0022uF	50V	B	GRM36B222K50PT	K22178813		1-	B	c3
C 1157	CHIP CAP.	0.0047uF	25V	B	GRM36B472K25PT	K22148830		1-	B	c2
C 1157	CHIP CAP.	0.0033uF	50V	B	GRM36B332K50PT	K22178815		12-	B	c2
C 1158	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c3
C 1159	CHIP TA.CAP.	10uF	6.3V		TEMSVA0J106M-8R	K78080027		1-	B	c2
C 1160	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	d2
C 1160	CHIP CAP.	0.022uF	16V	B	GRM36B223K16PT	K22128806		12-	B	d2
C 1161	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	c2
C 1162	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	c2
C 1163	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	c2
C 1164	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c3
C 1165	CHIP CAP.	100pF	50V	CH	GRM36CH101J50PT	K22178236		1-	A	E3
C 1166	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-11	B	d3
C 1167	CHIP CAP.	0.0022uF	50V	B	GRM36B222K50PT	K22178813		1-	B	d3
C 1168	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	d3
C 1169	CHIP CAP.	27pF	50V	CH	GRM36CH270J50PT	K22178222		1-	B	a1
C 1170	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	d3
C 1171	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	d3
C 1172	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	B	b2
C 1173	CHIP CAP.	0.047uF	10V	B	GRM36B473K10PT	K22108801	CS VERSION	8-	A	C2
C 1173	CHIP CAP.	0.047uF	10V	B	GRM36B473K10PT	K22108801	VERSION A	12-	A	C2
C 1174	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	d2
C 1176	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	c2
C 1177	CHIP CAP.	15pF	50V	CH	GRM36CH150J50PT	K22178216		1-	A	D2
C 1178	CHIP TA.CAP.	2.2uF	6.3V		TESVA0J225M1-8R	K78080009		1-	A	C1
C 1180	CHIP CAP.	18pF	50V	CH	GRM36CH180J50PT	K22178218	CS VERSION	1-7	B	b1
C 1180	CHIP CAP.	10pF	50V	CH	GRM36CH100D50PT	K22178212	VERSION D	1-7	B	b1
C 1180	CHIP CAP.	10pF	50V	CH	GRM36CH100D50PT	K22178212		8-	B	b1
C 1181	CHIP CAP.	3pF	50V	CJ	GRM36CJ030C50PT	K22178205	CS VERSION	1-	B	b1
C 1181	CHIP CAP.	4pF	50V	CH	GRM36CH040C50PT	K22178206	VERSION A	12-	B	b1
C 1181	CHIP CAP.	2pF	50V	CK	GRM36CK020C50PT	K22178204	VERSION D	1-	B	b1
C 1182	CHIP CAP.	120pF	50V	CH	GRM36CH121J50PT	K22178238		1-7	A	D2
C 1182	CHIP CAP.	82pF	50V	CH	GRM36CH820J50PT	K22178234	CS VERSION	8-	A	D2
C 1182	CHIP CAP.	56pF	50V	CH	GRM36CH560J50PT	K22178230	VERSION A	12-	A	D2
C 1182	CHIP CAP.	100pF	50V	CH	GRM36CH101J50PT	K22178236	VERSION A	16-	A	D2
C 1182	CHIP CAP.	120pF	50V	CH	GRM36CH121J50PT	K22178238	VERSION D	8-	A	D2
C 1183	CHIP TA.CAP.	0.1uF	20V		TEMSVA21D104M-8R	K78130020		1-	A	C2
C 1184	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	A	C1
C 1185	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c1
C 1186	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	A	E1
C 1189	CHIP CAP.	3pF	50V	CJ	GRM36CJ030C50PT	K22178205		1-7	B	b1
C 1189	CHIP CAP.	4pF	50V	CH	GRM36CH040C50PT	K22178206	CS VERSION	8-11	B	b1
C 1189	CHIP CAP.	3pF	50V	CJ	GRM36CJ030C50PT	K22178205	VERSION D	8-11	B	b1
C 1189	CHIP CAP.	4pF	50V	CH	GRM36CH040C50PT	K22178206		12-	B	b1
C 1190	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203		1-	A	D3
C 1191	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203		1-7	A	D2
C 1191	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203	VERSION D	8-11	A	D2

REF.	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT.	SIDE	LAY ADR
C 1192	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203		1-	A	D2
C 1193	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203		1-	A	D2
C 1194	CHIP CAP.	0.047uF	10V	B	GRM36B473K10PT	K22108801		1-	A	C1
C 1196	CHIP CAP.	1pF	50V	CK	GRM36CK010C50PT	K22178202	CS VERSION	1-	B	a1
C 1196	CHIP CAP.	1pF	50V	CK	GRM36CK010C50PT	K22178202	VERSION A	12-	B	a1
C 1198	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		1-	A	E1
C 1199	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203		1-	A	E1
C 1200	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203		1-	B	b2
C 1200	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		14-	B	b2
C 1201	CHIP CAP.	1uF	10V	B	GRM40B105K10PT	K22100802		1-	B	c1
C 1202	CHIP CAP.	10pF	50V	CH	GRM36CH100D50PT	K22178212	CS VERSION	8-	B	b1
C 1202	CHIP CAP.	10pF	50V	CH	GRM36CH100D50PT	K22178212	VERSION A	12-	B	b1
C 1202	CHIP CAP.	9pF	50V	CH	GRM36CH090D50PT	K22178211	VERSION D	1-	B	b1
C 1203	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	d2
C 1204	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	d3
C 1205	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	d3
C 1206	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	d2
C 1208	CHIP CAP.	22pF	50V	CH	GRM39CH220J50PT	K22174219		4-7		
C 1208	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		12-		
C 1209	CHIP CAP.	180pF	25V	CH	GRM36CH181J25PT	K22148201		12-		
C 1210	CHIP CAP.	0.001uF	50V	B	GRM36B102K50PT	K22178809		14-		
CD1001	CERAMIC DISC				CDBC450CX24-TC	H7901340		1-	B	c2
CF1001	CERAMIC FILTER				ALFYM450F=K	H3900531		1-	A	D3
CF1002	CERAMIC FILTER				SFPC450G-TC01	H3900518		1-	B	c3
D 1001	DIODE				HVC355B(TAPE)	G2070588	CS VERSION	1-	B	b2
D 1001	DIODE				HVC355B(TAPE)	G2070588	VERSION A	12-	B	b2
D 1001	DIODE				1SV284(TPH3)	G2070622	VERSION D	1-	B	b2
D 1002	DIODE				HVC355B(TAPE)	G2070588		1-	B	b2
D 1003	DIODE				HSU277TRF	G2070118		1-	B	b2
D 1004	DIODE				1SV230 TPH3	G2070126		1-	A	C2
D 1005	DIODE				HVU350TRF	G2070380		1-	B	b1
D 1006	DIODE				1SS355 TE-17	G2070470		1-	A	C2
D 1007	DIODE				RLS135 TE-11	G2070128		1-	B	a1
D 1008	DIODE				1SS355 TE-17	G2070470		1-	A	C2
D 1010	DIODE				HSU277TRF	G2070118		1-	B	a1
D 1011	DIODE				HSU277TRF	G2070118		1-	B	a1
D 1012	DIODE				HVC355B(TAPE)	G2070588		1-	B	a2
D 1013	DIODE				1SV280(TPH3)	G2070550		1-	B	a2
D 1014	DIODE				DAN235U TL	G2070176		1-	B	c1
D 1015	DIODE				MC2850-T11-1	G2070704		1-	B	d2
D 1016	DIODE				HVC355B(TAPE)	G2070588		1-	B	a2
D 1017	DIODE				1SV280(TPH3)	G2070550		1-	B	a2
D 1018	DIODE				1SS355 TE-17	G2070470		1-	B	d2
D 1019	DIODE				1SS355 TE-17	G2070470		1-	B	c1
D 1020	DIODE				1SS355 TE-17	G2070470		1-	B	c1
D 1021	DIODE				1SS355 TE-17	G2070470		1-	B	d2
D 1022	DIODE				HVC355B(TAPE)	G2070588		1-	B	a2
D 1023	DIODE				1SV280(TPH3)	G2070550		1-	B	a2
D 1024	DIODE				HVC355B(TAPE)	G2070588		1-	B	a2
D 1025	DIODE				1SV280(TPH3)	G2070550		1-	B	a3
D 1026	DIODE				HVC355B(TAPE)	G2070588		1-	B	a2
D 1027	DIODE				1SV280(TPH3)	G2070550		1-	B	a3
D 1028	LED				BRPY1211F-TR	G2070706		1-	A	E1
D 1029	DIODE				1SS321 TE85R	G2070076		1-	B	b1
D 1030	DIODE				1SS355 TE-17	G2070470		1-	B	c2
D 1031	DIODE				MC2846-T11-1	G2070702		1-	A	E2
D 1032	DIODE				MC2850-T11-1	G2070704		1-	B	d2
D 1033	DIODE				MC2848-T11-1	G2070694		1-	B	b3
D 1034	DIODE				MC2848-T11-1	G2070694		1-	B	c3
D 1035	DIODE				PTZ TE25 15A	G2070692		1-	A	E3
D 1036	DIODE				MC2850-T11-1	G2070704		1-	B	b2
F 1001	CHIP FUSE	4A			KAB-2402-402NA31	Q0000086		1-	A	E3
FB1001	CHIP COI				BLM11P600SPT	L1690601		1-	A	D3
FB1002	CHIP COI				BLM11P600SPT	L1690601		1-	A	D3
FB1003	CHIP COI				BLM11P600SPT	L1690601		1-	A	D2
FB1004	CHIP COI				BLM11P600SPT	L1690601		1-	A	D2
FB1005	CHIP COI				BLM11P600SPT	L1690601		1-	A	E3

MAIN Unit

REF.	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT.	SIDE	LAY ADR
J 1001	SPRING CONNECTOR					R0152490		1-	B	a1
J 1002	CONNECTOR				AXK6S40535P	P0091209		1-	B	e2
J 1003	CONNECTOR				HSJ1594-010055	P1090896		1-	B	b3
J 1004	SHIELD FINGER				2026 3100012	S5000196		1-	A	D2
J 1005	SHIELD FINGER				2026 3100012	S5000196		1-	A	D1
L 1001	M.RFC	0.22uH			ELJ-NDR22JF	L1690628		1-	B	b2
L 1002	M.RFC	2.2uH			LK1608 2R2K-T	L1690634		1-	B	b2
L 1003	COIL				E2 0.28-1.0-6T-R	L0022366		1-	B	a1
L 1004	COIL				E2 0.28-1.0-4.5T-R	L0022395		1-11	B	b2
L 1004	COIL				E2 0.28-1.0-4.5T-R	L0022395	CS VERSION	12-	B	b2
L 1004	COIL				E2 0.28-1.0-6T-R	L0022366	CS VERSION	14-	B	b2
L 1004	COIL				E2 0.28-1.0-6T-R	L0022366	VERSION A	12-	B	b2
L 1004	COIL				E2 0.28-1.0-4.5T-R	L0022395	VERSION D	12-	B	b2
L 1005	M.RFC	0.82uH			LK1608 R82K-T	L1690417		1-	B	b3
L 1006	COIL				E2 0.5-1.4-2.5T-L	L0022613		1-	B	a1
L 1007	COIL				E2 0.45-1.5-4.5T-L	L0022601		1-	B	a1
L 1008	M.RFC	0.22uH			ELJ-NDR22JF	L1690628		1-	B	b2
L 1008	M.RFC	0.082uH			HK1608 82NJ-T	L1690527		14-	B	b2
L 1009	COIL				E2 0.35-1.6-4.5T-L	L0022577		1-	B	a1
L 1010	M.RFC	0.22uH			ELJ-NDR22JF	L1690628		1-	B	b2
L 1011	COIL				E2 0.35-1.6-4.5T-L	L0022577		1-	B	a1
L 1012	M.RFC	0.015uH			HK1608 15NJ-T	L1690518		1-13	B	b2
L 1012	M.RFC	0.015uH			HK1608 15NJ-T	L1690518	CS VERSION	14-	B	b2
L 1012	M.RFC	0.027uH			HK1608 27NJ-T	L1690521	VERSION A	14-	B	b2
L 1012	M.RFC	0.015uH			HK1608 15NJ-T	L1690518	VERSION D	14-	B	b2
L 1013	M.RFC	0.015uH			HK1608 15NJ-T	L1690518		1-	B	b1
L 1014	COIL				E2 0.28-1.0-4.5T-R	L0022395		1-	B	a2
L 1015	COIL				E2 0.28-1.0-4.5T-R	L0022395		1-	B	a2
L 1016	M.RFC	0.015uH			HK1608 15NJ-T	L1690518		1-	B	c1
L 1017	M.RFC	0.01uH			HK1608 10NJ-T	L1690516	CS VERSION	1-	B	c1
L 1017	M.RFC	0.012uH			HK1608 12NJ-T	L1690517	VERSION A	12-	B	c1
L 1017	M.RFC	0.012uH			HK1608 12NJ-T	L1690517	VERSION D	1-	B	c1
L 1017	M.RFC	0.01uH			HK1608 10NJ-T	L1690516	VERSION D	11-	B	c1
L 1018	M.RFC	0.01uH			HK1608 10NJ-T	L1690516		1-7	B	a2
L 1018	M.RFC	0.01uH			HK1608 10NJ-T	L1690516	CS VERSION	8-	B	a2
L 1018	M.RFC	0.01uH			HK1608 10NJ-T	L1690516	VERSION A	12-	B	a2
L 1018	M.RFC	0.082uH			HK1608 82NJ-T	L1690527	VERSION D	8-	B	a2
L 1019	COIL				E2 0.45-1.4-4T-L	L0022391		1-	A	C1
L 1020	COIL				E2 0.5-1.4-2.5T-L	L0022613		1-	B	b1
L 1021	COIL				E2 0.28-1.0-4.5T-R	L0022395		1-	B	a3
L 1022	COIL	0.0033uH			AS050221-3R3NK	L0022635		1-	B	b1
L 1024	COIL				E2 0.28-1.0-4.5T-R	L0022395		1-	B	a3
L 1025	COIL				E2 0.45-1.4-4T-L	L0022391		1-	A	D1
L 1026	COIL				E2 0.4-1.3-2T-L	L0022580	CS VERSION	1-	B	b1
L 1026	COIL				E2 0.4-1.3-2T-L	L0022580	VERSION A	12-	B	b1
L 1026	COIL	0.0033uH			AS050221-3R3NK	L0022635	VERSION D	1-	B	b1
L 1027	COIL				E2 0.45-1.5-4.5T-L	L0022601		1-	B	b1
L 1028	CHIP COIL	0.22uH			LQN21AR22J04	L1690600		1-	B	a1
L 1029	M.RFC	0.068uH			HK1608 68NJ-T	L1690526		1-	B	b2
L 1029	M.RFC	0.033uH			HK1608 33NJ-T	L1690522		4-7	B	b2
L 1029	M.RFC	0.068uH			HK1608 68NJ-T	L1690526	CS VERSION	8-	B	b2
L 1029	M.RFC	0.082uH			HK1608 82NJ-T	L1690527	VERSION A	12-	B	b2
L 1029	M.RFC	0.033uH			HK1608 33NJ-T	L1690522	VERSION D	8-	B	b2
L 1030	M.RFC	0.82uH			LK1608 R82K-T	L1690417		1-	B	a2
L 1031	M.RFC	0.039uH			HK1608 39NJ-T	L1690523	CS VERSION	1-	B	a2
L 1031	M.RFC	0.039uH			HK1608 39NJ-T	L1690523	VERSION A	12-	B	a2
L 1031	M.RFC	0.033uH			HK1608 33NJ-T	L1690522	VERSION D	1-	B	a2
L 1032	M.RFC	0.012uH			HK1005 12NJ-T	L1691108	VERSION D	8-		
MC1001	MIC. ELEMENT				EM-100PT	M3290029		1-	A	C2
Q 1001	FET				2SK209GR TE85R	G3802097G		1-	A	E2
Q 1002	TRANSISTOR				RT1N441U-T11-1	G3070247		1-	B	b2
Q 1003	TRANSISTOR				RT1N441U-T11-1	G3070247		1-	A	C1
Q 1004	IC				MB15A01PFV1-G-BND-EF	G1092545		1-	A	C2
Q 1005	FET				2SK508-T2B K52	G3805087B		1-	B	b2
Q 1006	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	A	D2
Q 1007	TRANSISTOR				RT1N441U-T11-1	G3070247		1-	A	C3
Q 1008	TRANSISTOR				2SC5005-T1	G3350058		1-	B	b2

REF.	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT.	SIDE	LAY ADR
Q 1009	TRANSISTOR				2SC5005-T1	G3350058		1-	B	b1
Q 1010	TRANSISTOR				2SA1586Y TE85R	G3115867Y		1-	A	C2
Q 1011	IC				BR93LC56F-E2	G1092533		1-	B	d2
Q 1012	TRANSISTOR				2SC3357-T2 RF	G3333577F		1-	B	c1
Q 1013	TRANSISTOR				RT1P441U-T11-1	G3070248		1-	B	d1
Q 1014	IC				M37516E6HP(NO PROG.)	G1093148		1-	B	d1
Q 1015	TRANSISTOR				2SC5006-T1	G3350068		1-	B	a2
Q 1016	FET				2SK2973-T13	G3829738		1-	B	c1
Q 1017	IC				NJM2902V-TE1	G1091679		1-	A	C1
Q 1018	TRANSISTOR				RT1N441U-T11-1	G3070247		1-	A	C1
Q 1019	IC				TC4W66FU TE12L	G1091676		1-	B	c2
Q 1020	TRANSISTOR				RT1P441U-T11-1	G3070248		1-	B	c1
Q 1021	FET				2SK2974-T11	G3829747		1-	B	b1
Q 1022	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	d3
Q 1023	IC				NJM12903R(TE1)	G1093336		1-	B	d3
Q 1024	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	A	E1
Q 1025	FET				SGM2016AM-T7	G4070012		1-	B	b2
Q 1026	TRANSISTOR				FMW1 T98	G3070009		1-	B	e1
Q 1027	TRANSISTOR				FMW1 T98	G3070009		1-	A	E1
Q 1028	TRANSISTOR				FMW1 T98	G3070009		1-	B	e3
Q 1029	TRANSISTOR				2SB1132 T100 Q	G3211327Q		1-	B	e3
Q 1030	IC				NJM2902V-TE1	G1091679		1-	B	d3
Q 1031	TRANSISTOR				2SB1132 T100 Q	G3211327Q		1-	A	C1
Q 1032	TRANSISTOR				2SC4215Y TE85R	G3342157Y		1-	A	D2
Q 1033	TRANSISTOR				RT1N441U-T11-1	G3070247		1-	A	E1
Q 1034	TRANSISTOR				RT1N441U-T11-1	G3070247		1-	B	e3
Q 1035	TRANSISTOR				DTB123EK T146	G3070022		1-	B	e3
Q 1036	IC				BA4116FV-E2	G1092616		1-	B	b2
Q 1037	TRANSISTOR				RT1N441U-T11-1	G3070247		1-	A	D2
Q 1038	IC				S-80735SN-DZ-T1	G1091876		1-	B	e1
Q 1038	IC				S-80835CNMC-B8U-T2	G1093606		22-	B	e1
Q 1039	IC				TDA7233D-TR	G1091112		1-	A	E2
Q 1040	IC				TK11235BMCL	G1093137		1-	B	e1
Q 1040	IC				TK11235CMCL	G1093732		22-	B	e1
Q 1041	TRANSISTOR				RT1N441U-T11-1	G3070247		1-	B	d2
Q 1042	TRANSISTOR				2SA1586Y TE85R	G3115867Y		1-	B	d3
Q 1043	TRANSISTOR				RT1N441U-T11-1	G3070247		1-	B	c2
Q 1044	TRANSISTOR				RT1N441U-T11-1	G3070247		1-	B	c3
Q 1046	TRANSISTOR				RT1N441U-T11-1	G3070247		1-	A	C1
Q 1047	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	B	c2
Q 1048	TRANSISTOR				UMC5N TR	G3070137		1-	B	c2
Q 1050	TRANSISTOR				CPH6102-TL	G3070223		1-	A	E2
Q 1051	TRANSISTOR				2SC4154-T11-1E	G3341548E		1-	A	C1
Q 1052	TRANSISTOR				RT1N441U-T11-1	G3070247		1-	B	e2
Q 1053	TRANSISTOR				RT1N441U-T11-1	G3070247		1-	B	d1
Q 1054	TRANSISTOR				UMD3N TR	G3070211		1-	A	B2
Q 1055	IC				TC4W66FU TE12L	G1091676		1-	A	C2
Q 1056	TRANSISTOR				RT1N441U-T11-1	G3070247		1-	B	c1
R 1001	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	E2
R 1002	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	b2
R 1003	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-11	A	C1
R 1003	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045	CS VERSION	12-	A	C1
R 1003	CHIP RES.	27k	1/16W	5%	RMC1/16S 273JTH	J24189042	VERSION A	12-	A	C1
R 1003	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045	VERSION D	12-	A	C1
R 1004	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	A	D2
R 1005	CHIP RES.	82k	1/16W	5%	RMC1/16S 823JTH	J24189048		1-	A	C1
R 1005	CHIP RES.	82k	1/16W	0.5%	RR0510R-823-D	J24189165		22-	A	C1
R 1006	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-7	A	C2
R 1006	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025	CS VERSION	8-	A	C2
R 1006	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025	VERSION A	12-	A	C2
R 1006	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029	VERSION D	8-	A	C2
R 1007	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	C3
R 1008	CHIP RES.	6.8k	1/16W	5%	RMC1/16S 682JTH	J24189035		1-11	A	C1
R 1008	CHIP RES.	6.8k	1/16W	5%	RMC1/16S 682JTH	J24189035	CS VERSION	12-	A	C1
R 1008	CHIP RES.	5.6k	1/16W	5%	RMC1/16S 562JTH	J24189034	VERSION A	12-	A	C1
R 1008	CHIP RES.	6.8k	1/16W	5%	RMC1/16S 682JTH	J24189035	VERSION D	12-	A	C1
R 1009	CHIP RES.	1.5k	1/16W	5%	RMC1/16S 152JTH	J24189027		1-7	A	C2

MAIN Unit

REF.	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT.	SIDE	LAY ADR
R 1009	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029	CS VERSION	8-	A	C2
R 1009	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029	VERSION A	12-	A	C2
R 1009	CHIP RES.	1.5k	1/16W	5%	RMC1/16S 152JTH	J24189027	VERSION D	8-	A	C2
R 1010	CHIP RES.	82k	1/16W	5%	RMC1/16S 823JTH	J24189048		1-	A	C1
R 1010	CHIP RES.	82k	1/16W	0.5%	RR0510R-823-D	J24189165		22-	A	C1
R 1011	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	C2
R 1012	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	b1
R 1013	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	b2
R 1014	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	b1
R 1015	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	C3
R 1016	CHIP RES.	27k	1/16W	5%	RMC1/16S 273JTH	J24189042		1-7	A	C3
R 1016	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045	CS VERSION	8-11	A	C3
R 1016	CHIP RES.	27k	1/16W	5%	RMC1/16S 273JTH	J24189042	VERSION D	8-11	A	C3
R 1016	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		12-	A	C3
R 1017	CHIP RES.	1.5k	1/16W	5%	RMC1/16S 152JTH	J24189027		1-	A	C3
R 1018	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	C1
R 1018	CHIP RES.	100k	1/16W	0.5%	RR0510R-104-D	J24189167		22-	A	C1
R 1019	CHIP RES.	56k	1/16W	5%	RMC1/16S 563JTH	J24189046		1-	A	C3
R 1020	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	A	C3
R 1021	CHIP RES.	6.8k	1/16W	5%	RMC1/16S 682JTH	J24189035		1-10	A	C3
R 1021	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037	CS VERSION	11-	A	C3
R 1021	CHIP RES.	6.8k	1/16W	5%	RMC1/16S 682JTH	J24189035	VERSION A	11-	A	C3
R 1021	CHIP RES.	6.8k	1/16W	5%	RMC1/16S 682JTH	J24189035	VERSION D	11-	A	C3
R 1022	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	A	C2
R 1023	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	C1
R 1023	CHIP RES.	100k	1/16W	0.5%	RR0510R-104-D	J24189167		22-	A	C1
R 1024	CHIP RES.	390	1/16W	5%	RMC1/16S 391JTH	J24189020		1-	B	b2
R 1024	CHIP RES.	150	1/16W	5%	RMC1/16S 151JTH	J24189015		14-	B	b2
R 1025	CHIP RES.	39k	1/16W	5%	RMC1/16S 393JTH	J24189044		1-	A	C1
R 1026	CHIP RES.	39k	1/16W	5%	RMC1/16S 393JTH	J24189044		1-	A	C1
R 1026	CHIP RES.	39k	1/16W	0.5%	RR0510R-393-D	J24189157		22-	A	C1
R 1027	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	d1
R 1028	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	A	B2
R 1029	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	A	B2
R 1030	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	A	B2
R 1031	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	B	b2
R 1033	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-7	A	C1
R 1033	CHIP RES.	15k	1/16W	5%	RMC1/16S 153JTH	J24189039	CS VERSION	8-	A	C1
R 1033	CHIP RES.	15k	1/16W	0.5%	RR0510R-153-D	J24189147	CS VERSION	22-	A	C1
R 1033	CHIP RES.	18k	1/16W	5%	RMC1/16S 183JTH	J24189040	VERSION A	12-	A	C1
R 1033	CHIP RES.	18k	1/16W	0.5%	RR0510R-183-D	J24189149	VERSION A	22-	A	C1
R 1033	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037	VERSION D	8-	A	C1
R 1033	CHIP RES.	10k	1/16W	0.5%	RR0510P-103-D	J24189143	VERSION D	22-	A	C1
R 1034	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	A	C2
R 1034	CHIP RES.	22k	1/16W	0.5%	RR0510R-223-D	J24189151		22-	A	C2
R 1035	CHIP RES.	68k	1/16W	5%	RMC1/16S 683JTH	J24189047		1-	A	C1
R 1036	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	A	C2
R 1036	CHIP RES.	22k	1/16W	0.5%	RR0510R-223-D	J24189151		22-	A	C2
R 1037	CHIP RES.	150	1/16W	5%	RMC1/16S 151JTH	J24189015		1-	B	b2
R 1037	CHIP RES.	330	1/16W	5%	RMC1/16S 331JTH	J24189019		15-	B	b2
R 1038	CHIP RES.	68k	1/16W	5%	RMC1/16S 683JTH	J24189047		1-	A	C1
R 1039	CHIP RES.	1.8M	1/16W	5%	RMC1/16S 185JTH	J24189064		1-	A	C2
R 1040	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	C2
R 1041	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	B	b2
R 1042	CHIP RES.	1.2M	1/16W	5%	RMC1/16S 125JTH	J24189062		1-	B	c1
R 1042	CHIP RES.	1.8M	1/16W	5%	RMC1/16S 185JTH	J24189064		4-	B	c1
R 1043	CHIP RES.	1.8k	1/16W	5%	RMC1/16S 182JTH	J24189028		1-	A	C2
R 1043	CHIP RES.	1.8k	1/16W	0.5%	RR0510P-182-D	J24189125		22-	A	C2
R 1044	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	A	C2
R 1045	CHIP RES.	18k	1/16W	5%	RMC1/16S 183JTH	J24189040		1-	B	c2
R 1046	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	b2
R 1046	CHIP RES.	330	1/16W	5%	RMC1/16S 331JTH	J24189019		15-	B	b2
R 1047	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	d2
R 1048	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	B2
R 1050	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	e2
R 1051	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		1-	B	d1
R 1052	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	d2

REF.	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT.	SIDE	LAY ADR
R 1053	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	a2
R 1054	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	b2
R 1055	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	c1
R 1056	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	c1
R 1057	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	d2
R 1058	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	a2
R 1059	CHIP RES.	82k	1/16W	5%	RMC1/16S 823JTH	J24189048		1-	B	c2
R 1060	CHIP RES.	39k	1/16W	5%	RMC1/16S 393JTH	J24189044		1-	B	c1
R 1061	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	c1
R 1062	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	c1
R 1063	CHIP RES.	5.6k	1/16W	5%	RMC1/16S 562JTH	J24189034		1-15	B	c1
R 1063	CHIP RES.	5.6k	1/16W	5%	RMC1/16S 562JTH	J24189034	CS VERSION	16-	B	c1
R 1063	CHIP RES.	5.6k	1/16W	5%	RMC1/16S 562JTH	J24189034	VERSION A	16-	B	c1
R 1063	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033	VERSION D	16-	B	c1
R 1064	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	A	C1
R 1065	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	d1
R 1066	CHIP RES.	27k	1/16W	5%	RMC1/16S 273JTH	J24189042		1-	B	c1
R 1067	CHIP RES.	330k	1/16W	5%	RMC1/16S 334JTH	J24189055		1-	B	d1
R 1068	CHIP RES.	82k	1/16W	5%	RMC1/16S 823JTH	J24189048		1-	B	d1
R 1069	CHIP RES.	820k	1/16W	5%	RMC1/16S 824JTH	J24189060		1-	A	C2
R 1070	CHIP RES.	4.7	1/16W	5%	RMC1/16S 4R7JTH	J24189066	CS VERSION	1-7	B	c1
R 1070	CHIP RES.	47	1/16W	5%	RMC1/16S 470JTH	J24189009	VERSION D	1-7	B	c1
R 1070	CHIP RES.	47	1/16W	5%	RMC1/16S 470JTH	J24189009		8-	B	c1
R 1071	CHIP RES.	390	1/10W	5%	RMC1/10T 391J	J24205391		1-	B	c1
R 1072	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	d2
R 1073	CHIP RES.	27k	1/16W	5%	RMC1/16S 273JTH	J24189042		1-	A	C2
R 1074	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	d3
R 1074	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		12-	B	d3
R 1075	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	d2
R 1076	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	a2
R 1077	CHIP RES.	18k	1/16W	5%	RMC1/16S 183JTH	J24189040		1-	A	C2
R 1078	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	c1
R 1079	CHIP RES.	82k	1/16W	5%	RMC1/16S 823JTH	J24189048		1-	B	d1
R 1080	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	d1
R 1081	CHIP RES.	39k	1/16W	5%	RMC1/16S 393JTH	J24189044		1-	B	d1
R 1082	CHIP RES.	8.2k	1/16W	5%	RMC1/16S 822JTH	J24189036		1-	B	c1
R 1083	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	a2
R 1084	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	d1
R 1085	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	d1
R 1086	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-7	B	a2
R 1086	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049	CS VERSION	8-	B	a2
R 1086	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049	VERSION A	12-	B	a2
R 1087	CHIP RES.	220	1W	5%	RMC1 221JTE	J24305221		1-	A	D1
R 1088	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	a2
R 1090	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	A	E1
R 1091	CHIP RES.	5.6k	1/16W	5%	RMC1/16S 562JTH	J24189034		1-15	B	c1
R 1091	CHIP RES.	5.6k	1/16W	5%	RMC1/16S 562JTH	J24189034	CS VERSION	16-	B	c1
R 1091	CHIP RES.	5.6k	1/16W	5%	RMC1/16S 562JTH	J24189034	VERSION A	16-	B	c1
R 1091	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033	VERSION D	16-	B	c1
R 1092	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	a2
R 1093	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	d3
R 1095	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	e1
R 1097	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	a2
R 1098	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	b1
R 1099	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	e3
R 1102	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	c1
R 1103	CHIP RES.	68	1/16W	5%	RMC1/16S 680JTH	J24189011		1-	B	c1
R 1104	CHIP RES.	220	1W	5%	RMC1 221JTE	J24305221		1-	A	D1
R 1105	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	b2
R 1106	CHIP RES.	150	1/16W	5%	RMC1/16S 151JTH	J24189015		1-	B	c1
R 1107	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	E2
R 1108	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	b2
R 1109	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		1-	B	b1
R 1110	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		1-	B	a1
R 1111	CHIP RES.	33	1/16W	5%	RMC1/16S 330JTH	J24189007		1-	B	a2
R 1111	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		15-	B	a2
R 1112	CHIP RES.	68	1/10W	5%	RMC1/10T 680J	J24205680		1-	B	a1

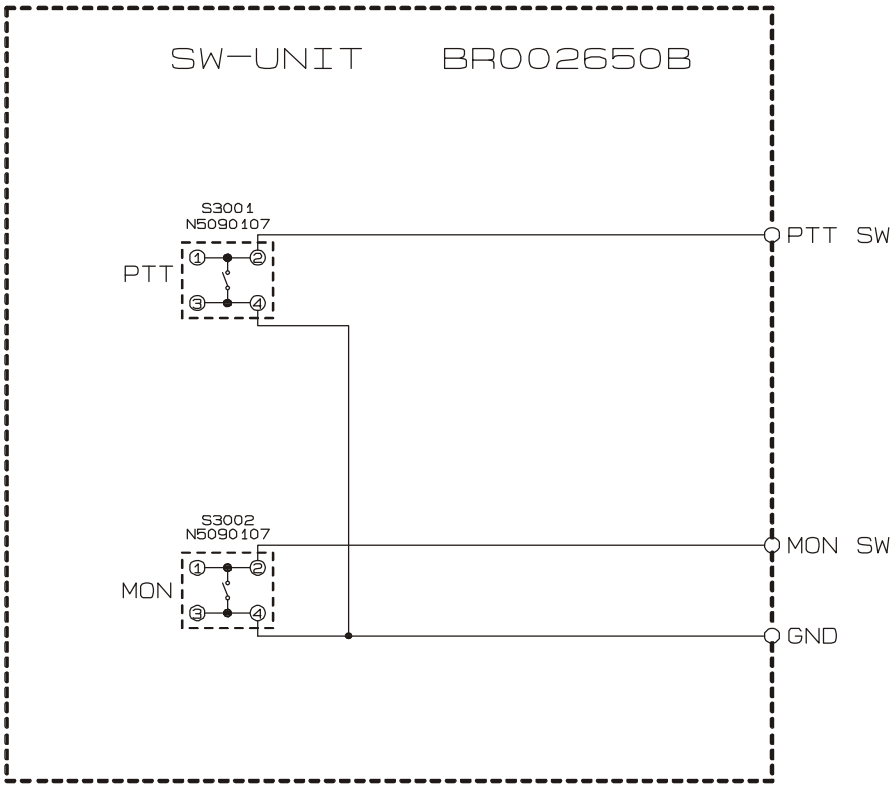
MAIN Unit

REF.	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT.	SIDE	LAY ADR
R 1113	CHIP RES.	560	1/16W	5%	RMC1/16S 561JTH	J24189022		1-	B	b2
R 1114	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	E1
R 1115	CHIP RES.	5.6k	1/16W	5%	RMC1/16S 562JTH	J24189034		1-	A	E1
R 1116	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	e1
R 1117	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	e2
R 1118	CHIP RES.	220	1/16W	5%	RMC1/16S 221JTH	J24189017		1-	A	E1
R 1119	CHIP RES.	390	1/16W	5%	RMC1/16S 391JTH	J24189020		1-	A	E1
R 1120	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	B	e2
R 1121	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	E1
R 1122	CHIP RES.	330	1/16W	5%	RMC1/16S 331JTH	J24189019		1-	A	D2
R 1123	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	B	e1
R 1124	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	E1
R 1125	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		1-	A	C1
R 1126	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	A	C1
R 1127	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		1-	B	e3
R 1128	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	B	e3
R 1129	CHIP RES.	22	1/16W	5%	RMC1/16S 220JTH	J24189005		1-	B	a2
R 1131	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	D2
R 1132	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	A	E1
R 1133	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	d3
R 1134	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	c1
R 1135	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	D2
R 1136	CHIP RES.	18k	1/16W	5%	RMC1/16S 183JTH	J24189040		1-	B	d2
R 1137	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	B	d2
R 1138	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	A	E2
R 1139	CHIP RES.	150k	1/16W	5%	RMC1/16S 154JTH	J24189051		1-	A	E2
R 1140	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	D3
R 1141	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	D3
R 1142	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	B	c3
R 1143	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	e1
R 1144	CHIP RES.	470	1/10W	5%	RMC1/10T 471J	J24205471		1-	A	E2
R 1145	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	d2
R 1146	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		1-	B	b3
R 1147	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	d2
R 1147	CHIP RES.	56k	1/16W	5%	RMC1/16S 563JTH	J24189046		12-	B	d2
R 1148	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	d2
R 1149	CHIP RES.	15k	1/16W	5%	RMC1/16S 153JTH	J24189039	CS VERSION	1-7	B	c2
R 1149	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037	VERSION D	1-7	B	c2
R 1149	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		8-	B	c2
R 1149	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		12-	B	c2
R 1150	CHIP RES.	150k	1/16W	5%	RMC1/16S 154JTH	J24189051		1-	B	c2
R 1151	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		1-	B	c3
R 1152	CHIP RES.	2.7k	1/16W	5%	RMC1/16S 272JTH	J24189030		1-	B	c2
R 1152	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		12-	B	c2
R 1153	CHIP RES.	2.2M	1/16W	5%	RMC1/16S 225JTH	J24189065		1-	B	d3
R 1154	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	A	C2
R 1155	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	c2
R 1155	CHIP RES.	2.7k	1/16W	5%	RMC1/16S 272JTH	J24189030		12-24	B	c2
R 1155	CHIP RES.	2.7k	1/16W	5%	RMC1/16S 272JTH	J24189030	CS VERSION	25-	B	c2
R 1155	CHIP RES.	2.7k	1/16W	5%	RMC1/16S 272JTH	J24189030	VERSION A	25-	B	c2
R 1155	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031	VERSION D	25-	B	c2
R 1156	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	c2
R 1157	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		1-	B	c3
R 1158	CHIP RES.	1.5k	1/16W	5%	RMC1/16S 152JTH	J24189027		1-	B	c2
R 1159	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		1-	B	b3
R 1160	CHIP RES.	120k	1/16W	5%	RMC1/16S 124JTH	J24189050		1-	B	d2
R 1160	CHIP RES.	82k	1/16W	5%	RMC1/16S 823JTH	J24189048		12-	B	d2
R 1161	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	e1
R 1161	CHIP RES.	15k	1/16W	5%	RMC1/16S 153JTH	J24189039		11-	B	e1
R 1162	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	d3
R 1163	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	e1
R 1163	CHIP RES.	6.8k	1/16W	5%	RMC1/16S 682JTH	J24189035		11-	B	e1
R 1164	CHIP RES.	220	1/16W	5%	RMC1/16S 221JTH	J24189017		1-	A	E2
R 1165	CHIP RES.	150k	1/16W	5%	RMC1/16S 154JTH	J24189051		1-	B	d2
R 1165	CHIP RES.	180k	1/16W	5%	RMC1/16S 184JTH	J24189052		12-	B	d2
R 1166	CHIP RES.	10	1/16W	5%	RMC1/16S 100JTH	J24189001		1-	A	E2
R 1167	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		1-	B	c3

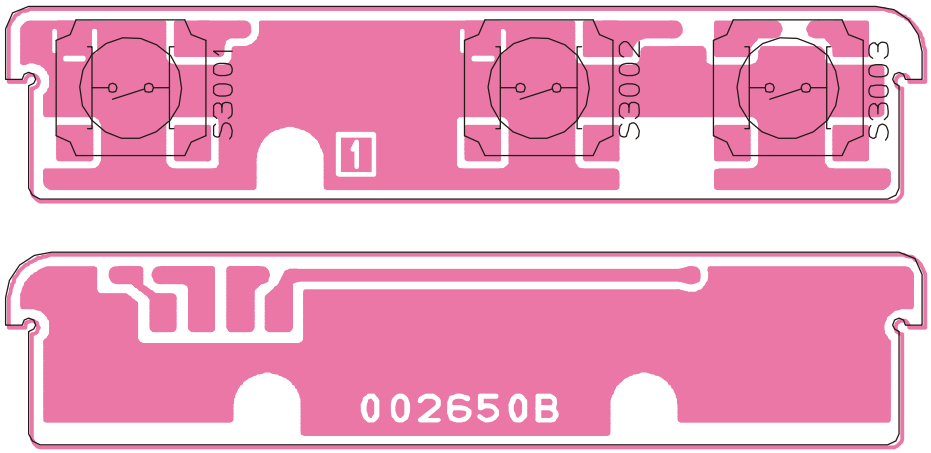
REF.	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT.	SIDE	LAY ADR
R 1168	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	B	c3
R 1169	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	B	d3
R 1170	CHIP RES.	68k	1/16W	5%	RMC1/16S 683JTH	J24189047		1-	B	c3
R 1171	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	c2
R 1172	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	c3
R 1173	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	c2
R 1173	CHIP RES.	82k	1/16W	5%	RMC1/16S 823JTH	J24189048		12-	B	c2
R 1174	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	c2
R 1175	CHIP RES.	5.6k	1/16W	5%	RMC1/16S 562JTH	J24189034		1-	B	c2
R 1176	CHIP RES.	5.6k	1/16W	5%	RMC1/16S 562JTH	J24189034		1-	B	c3
R 1176	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		12-24	B	c3
R 1176	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037	CS VERSION	25-	B	c3
R 1176	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037	VERSION A	25-	B	c3
R 1176	CHIP RES.	8.2k	1/16W	5%	RMC1/16S 822JTH	J24189036	VERSION D	25-	B	c3
R 1177	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	c2
R 1178	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	d1
R 1179	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	d1
R 1180	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	A	C1
R 1181	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	C1
R 1182	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	d3
R 1183	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	d3
R 1184	CHIP RES.	560	1/16W	5%	RMC1/16S 561JTH	J24189022		1-24	B	d3
R 1184	CHIP RES.	560	1/16W	5%	RMC1/16S 561JTH	J24189022	CS VERSION	25-	B	d3
R 1184	CHIP RES.	560	1/16W	5%	RMC1/16S 561JTH	J24189022	VERSION A	25-	B	d3
R 1184	CHIP RES.	680	1/16W	0.5%	RR0510P-681-D	J24189115	VERSION D	25-	B	d3
R 1187	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-7	A	C2
R 1187	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070	VERSION D	8-	A	C2
R 1188	CHIP RES.	39k	1/16W	5%	RMC1/16S 393JTH	J24189044		1-	A	C1
R 1189	CHIP RES.	82k	1/16W	5%	RMC1/16S 823JTH	J24189048		1-	A	C1
R 1191	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	d2
R 1192	CHIP RES.	1M	1/16W	5%	RMC1/16S 105JTH	J24189061		1-	B	c2
R 1193	CHIP RES.	33	1/16W	5%	RMC1/16S 330JTH	J24189007		1-	B	c2
R 1195	CHIP RES.	68	1/10W	5%	RMC1/10T 680J	J24205680		1-	B	a1
R 1196	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-11	B	a2
R 1196	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021	CS VERSION	12-	B	a2
R 1196	CHIP RES.	220	1/16W	5%	RMC1/16S 221JTH	J24189017	VERSION A	12-	B	a2
R 1196	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021	VERSION D	12-	B	a2
R 1197	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	A	E2
R 1198	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	d2
R 1199	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-3	B	a2
R 1199	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		8-	B	a2
R 1200	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	b1
R 1201	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	B1
R 1202	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	B2
R 1203	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	c1
R 1204	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	c1
R 1205	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	c2
R 1207	CHIP RES.	6.8k	1/16W	5%	RMC1/16S 682JTH	J24189035		1-	B	c1
R 1208	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	C2
R 1209	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	A	C1
R 1210	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	c1
R 1211	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	d2
R 1213	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	d3
R 1214	CHIP RES.	820k	1/16W	5%	RMC1/16S 824JTH	J24189060		1-	B	d3
R 1215	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	B	d3
R 1216	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	d3
R 1217	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	d3
R 1218	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	d3
R 1219	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	d3
R 1220	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	e2
R 1221	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-7	A	C2
R 1221	CHIP RES.	5.6k	1/16W	5%	RMC1/16S 562JTH	J24189034	CS VERSION	8-	A	C2
R 1221	CHIP RES.	5.6k	1/16W	5%	RMC1/16S 562JTH	J24189034	VERSION A	12-	A	C2
R 1221	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041	VERSION D	8-	A	C2
R 1222	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	A	C2
R 1223	CHIP RES.	3.9k	1/16W	5%	RMC1/16S 392JTH	J24189032		1-7	A	C2
R 1223	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033	CS VERSION	8-	A	C2

MAIN Unit

REF.	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT.	SIDE	LAY ADR
R 1223	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033	VERSION A	12-	A	C2
R 1223	CHIP RES.	3.9k	1/16W	5%	RMC1/16S 392JTH	J24189032	VERSION D	8-	A	C2
R 1224	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	C2
R 1225	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	d2
R 1226	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	d1
R 1227	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	e2
R 1228	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	e2
R 1229	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	d2
R 1230	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	d2
R 1232	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		12-		
R 1233	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		12-		
R 1234	CHIP RES.	390	1/16W	5%	RMC1/16S 391JTH	J24189020		14-		
S 1002	ROTARY SWITCH				TP70QF4162	N0190178		1-	B	a2
TC1001	TRIMMER CAP.	6pF			TC13C060C-TP03	K91000220		1-	A	B2
TH1001	THERMISTOR				TBPS1R103K440H5Q	G9090067		1-	A	B3
TH1002	THERMISTOR				TBPS1R103K440H5Q	G9090067		1-	A	C3
TH1003	THERMISTOR				TBPS1R473K475H5Q	G9090068		1-	A	C3
TH1004	THERMISTOR				TBPS1R473K475H5Q	G9090068		1-	B	b1
TH1005	THERMISTOR				TBPS1R473K475H5Q	G9090068		1-	A	C1
VR1001	POT.	50k			EVN-5ESX50B54	J51811503		1-	A	E2
VR1002	POT.	10k			EVN-5ESX50B14	J51811103		1-	A	C1
VR1003	POT.	10k			EVN-5ESX50B14	J51811103		1-	A	C3
VR1004	POT.	10k			EVN-5ESX50B14	J51811103		1-	A	E1
VR1005	POT.	100k			EVN-5ESX50B15	J51811104		1-	A	C3
VR1006	POT.				TP76N00N 20KA/SW	J60800239		1-	B	a3
X 1001	XTAL TOP-B	14.5MHz			14.5MHZ	H0103196		1-	A	C2
X 1002	XTAL SX-1319	3.6864MHz			3.6864MHZ	H0103214		1-	B	d1
XF1001	XTAL FILTER				43Y12B6	H1102323		1-	B	b2
XF1002	XTAL FILTER				43Y12B6	H1102323		1-	B	b2
	TERMINAL HOLDER					RA010340A		1-		
	TERMINAL HOLDER					RA010340B		29-		
	TERMINAL PLATE R					RA0107000		1-		
	SHIELD CASE VCO					RA0204500		1-		
	HOLDER RUBBER				(MIC)	RA0110200		1-		
	O RING				(SHAFT)	RA008890A		1-		
	RUBBER SHEET					RA0347000		1-		



Parts Layout



Side A

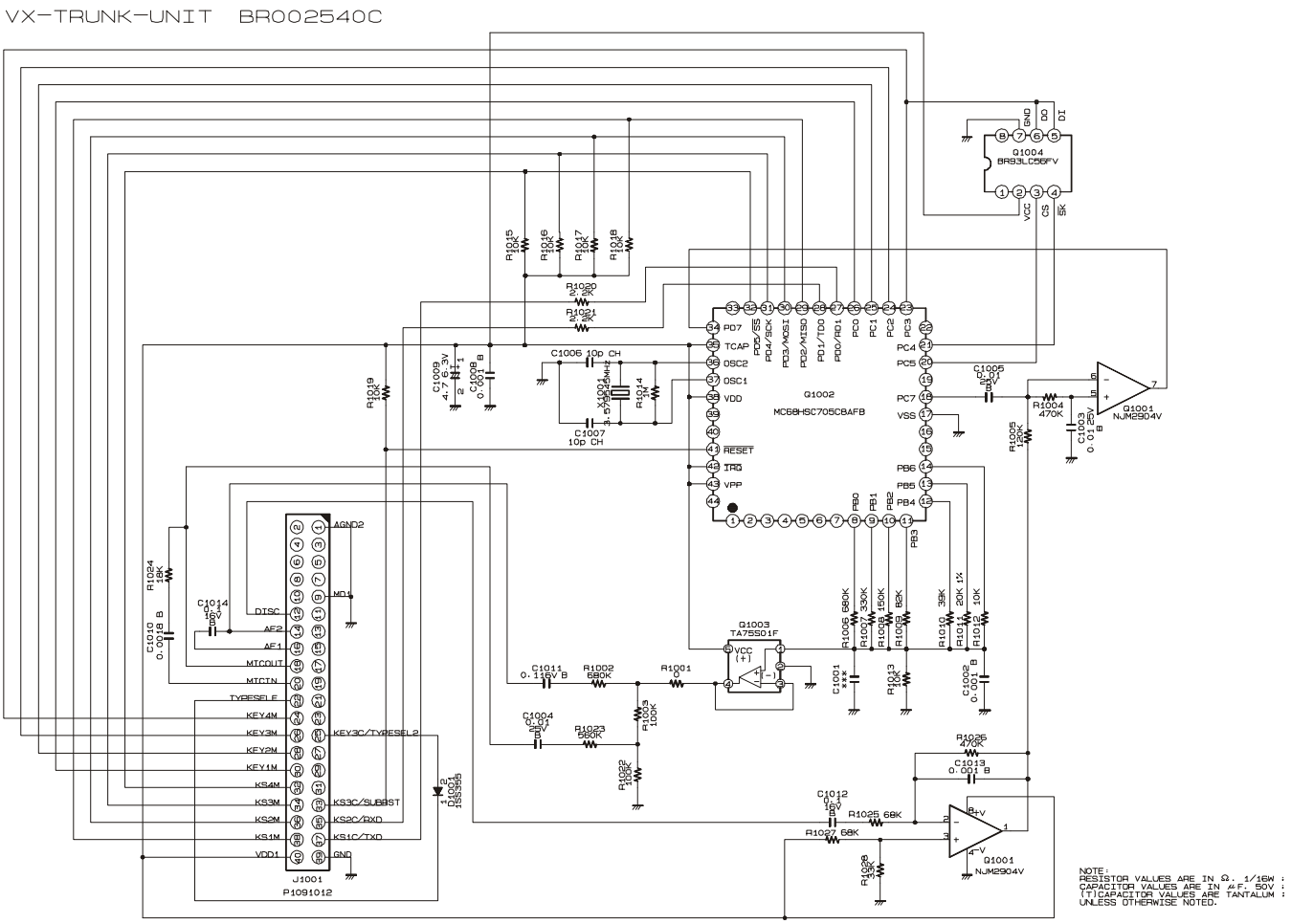
Side B

Parts List

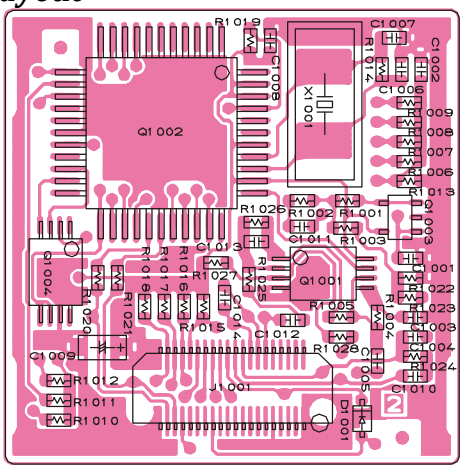
REF.	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT.	SIDE	LAY ADR
	PCB with Components					CB1825001				
	Printed Circuit Board					FR002650B				
S 3001	TACT SWITCH				SOP-114HST R66-5374	N5090107		1-	A	
S 3002	TACT SWITCH				SOP-114HST R66-5374	N5090107		1-	A	
	MYLAR SHEET					RA011720A		1-		

VTP-50 VX-Trunk Unit

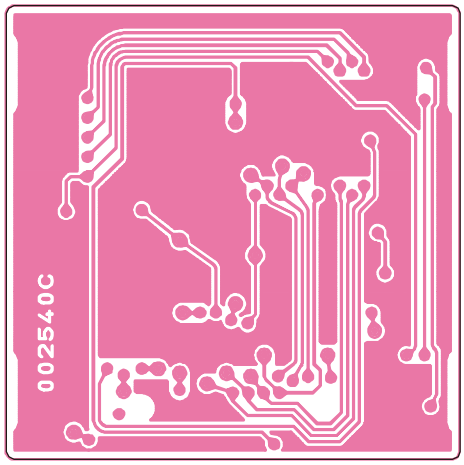
Circuit Diagram



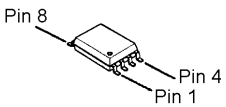
Parts Layout



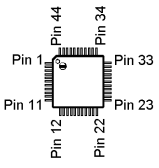
Side A



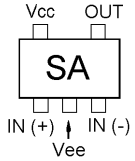
Side B



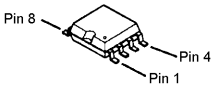
NJM2904V
(Q1001)



MC68HSC705C8A502
(Q1002)



TA75S01F (SA)
(Q1003)



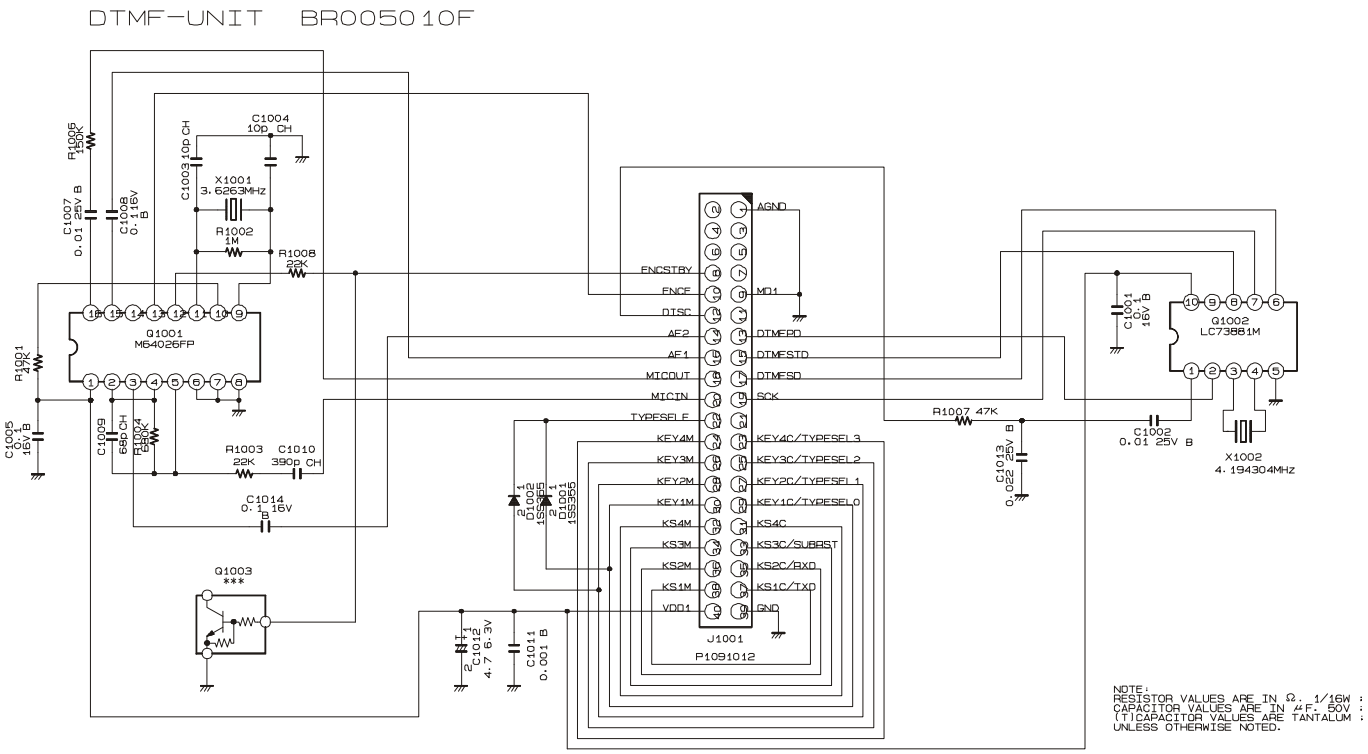
BR93LC56FV
(Q1004)

Parts List

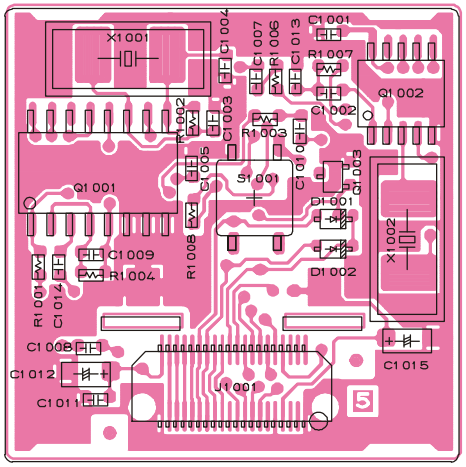
REF.	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT.	SIDE	LAY ADR
	Printed Circuit Board					FR002540C		1-		
C 1002	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	
C 1003	CHIP CAP.	0.01uF	25V	B	GRM39B103M25PT	K22144802		1-	A	
C 1003	CHIP CAP.	0.01uF	25V	B	GRM39B103K25PT	K22144803		9-	A	
C 1004	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	
C 1004	CHIP CAP.	0.01uF	25V	B	GRM39B103K25PT	K22144803		9-	A	
C 1005	CHIP CAP.	0.01uF	25V	B	GRM39B103M25PT	K22144802		1-	A	
C 1005	CHIP CAP.	0.01uF	25V	B	GRM39B103K25PT	K22144803		9-	A	
C 1006	CHIP CAP.	10pF	50V	CH	GRM39CH100C50PT	K22174248		1-	A	
C 1007	CHIP CAP.	10pF	50V	CH	GRM39CH100C50PT	K22174248		1-	A	
C 1008	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	
C 1009	CHIP TA.CAP.	4.7uF	6.3V		TEMSVA0J475M-8R	K78080017		1-	A	
C 1010	CHIP CAP.	0.0018uF	50V	B	GRM39B182M50PT	K22174812		1-	A	
C 1011	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	
C 1012	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	
C 1013	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	
C 1014	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	
D 1001	DIODE				1SS355 TE-17	G2070470		1-	A	
J 1001	CONNECTOR				AXK5S40035P	P1091012		1-	A	
Q 1001	IC				NJM2904V-TE1	G1091677		1-	A	
Q 1002	IC				MC68HSC705C8A502-6030 130	G1092917		1-	A	
Q 1002	IC				MC68HSC705C8A502-6030 131	G1093326		6-	A	
Q 1003	IC				TA75S01F TE85R	G1091593		1-	A	
Q 1004	IC				BR93LC56FV-E2	G1092787		1-	A	
R 1001	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	A	
R 1002	CHIP RES.	680k	1/16W	5%	RMC1/16 684JATP	J24185684		1-	A	
R 1003	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	A	
R 1004	CHIP RES.	470k	1/16W	5%	RMC1/16 474JATP	J24185474		1-	A	
R 1005	CHIP RES.	120k	1/16W	5%	RMC1/16 124JATP	J24185124		1-	A	
R 1006	CHIP RES.	680k	1/16W	5%	RMC1/16 684JATP	J24185684		1-	A	
R 1007	CHIP RES.	330k	1/16W	5%	RMC1/16 334JATP	J24185334		1-	A	
R 1008	CHIP RES.	150k	1/16W	5%	RMC1/16 154JATP	J24185154		1-	A	
R 1009	CHIP RES.	82k	1/16W	5%	RMC1/16 823JATP	J24185823		1-	A	
R 1010	CHIP RES.	39k	1/16W	5%	RMC1/16 393JATP	J24185393		1-	A	
R 1011	CHIP RES.	20k	1/16W	1%	RMC1/16 203FTP	J24183203		1-	A	
R 1012	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	
R 1013	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	
R 1014	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		1-	A	
R 1015	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	
R 1016	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	
R 1017	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	
R 1018	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	
R 1019	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	
R 1020	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	A	
R 1021	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	A	
R 1022	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	A	
R 1023	CHIP RES.	560k	1/16W	5%	RMC1/16 564JATP	J24185564		1-	A	
R 1024	CHIP RES.	18k	1/16W	5%	RMC1/16 183JATP	J24185183		1-	A	
R 1025	CHIP RES.	68k	1/16W	5%	RMC1/16 683JATP	J24185683		1-	A	
R 1026	CHIP RES.	470k	1/16W	5%	RMC1/16 474JATP	J24185474		1-	A	
R 1027	CHIP RES.	68k	1/16W	5%	RMC1/16 683JATP	J24185683		1-	A	
R 1028	CHIP RES.	33k	1/16W	5%	RMC1/16 333JATP	J24185333		1-	A	
X 1001	XTAL SX-1315	3.579545MHz			3.579545MHZ	H0103185		1-	A	
	BLIND SHEET					RA0109300		1-		

FVP-25 Encryption / DTMF Pager Unit

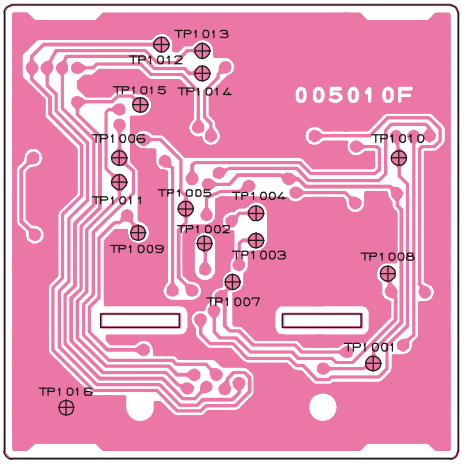
Circuit Diagram



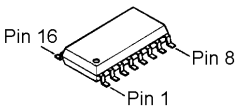
Parts Layout



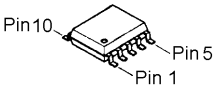
Side A



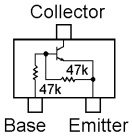
Side B



M64026FP
(Q1001)



LC73881
(Q1002)



DTC144EU (26)
(Q1003)

Parts List

REF.	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT.	SIDE	LAY ADR
	Printed Circuit Board					FR005010F				
C 1001	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	B1
C 1002	CHIP CAP.	0.01uF	25V	B	GRM39B103M25PT	K22144802		1-	A	B1
C 1003	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	A	A1
C 1004	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	A	A1
C 1005	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	A1
C 1007	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	A1
C 1007	CHIP CAP.	0.01uF	25V	B	GRM39B103M25PT	K22144802		32-	A	A1
C 1008	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	A2
C 1009	CHIP CAP.	68pF	50V	CH	GRM39CH680J50PT	K22174231		1-	A	A1
C 1010	CHIP CAP.	390pF	50V	CH	GRM39CH391J50PT	K22174255		1-	A	A1
C 1011	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821		1-	A	A2
C 1012	CHIP TA.CAP.	4.7uF	6.3V		TEMSVA0J475M-8R	K78080017		1-	A	A2
C 1013	CHIP CAP.	0.022uF	25V	B	GRM39B223K25PT	K22144807		1-	A	A1
C 1014	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	A	A1
D 1001	DIODE				1SS355 TE-17	G2070470		1-	A	B1
D 1002	DIODE				1SS355 TE-17	G2070470		1-	A	B1
J 1001	CONNECTOR				AXK5S40035P	P1091012		1-	A	A2
Q 1001	IC				M64026FP-650C	G1092754		1-	A	A1
Q 1002	IC				LC73881M-TLM	G1092755		1-	A	B1
Q 1003	TRANSISTOR				DTC144EU T106	G3070041		1-	A	B1
R 1001	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	A	A1
R 1002	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		1-	A	A1
R 1003	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	A	A1
R 1004	CHIP RES.	680k	1/16W	5%	RMC1/16 684JATP	J24185684		1-	A	A1
R 1006	CHIP RES.	150k	1/16W	5%	RMC1/16 154JATP	J24185154		1-	A	A1
R 1007	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	A	B1
R 1008	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	A	A1
R 1008	CARBON FILM RES.	22k	1/8W	5%	RD18TJ223 22K	J01215223		14-	A	A1
R 1008	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		17-	A	A1
X 1001	XTAL SX-1315	3.6263MHz			3.6263MHZ	H0103183		1-	A	A1
X 1002	XTAL SX-1315	4.194304MHz			4.194304MHZ	H0103184		1-	A	B1
	BLIND SHEET					RA0109300		1-